Wm. Hughes

SURGICAL TRACTS,

CONTAINING

A TREATISE Rebach

UPON

ULCERS of the LEGS;

IN WHICH

FORMER METHODS of TREATMENT

Are candidly examined, and compared

WITH ONE MORE RATIONAL AND SAFE;

Effected without Rest and Confinement.

TOGETHER WITH

Hints on a SUCCESSFUL METHOD of treating some

SCROPHULOUS TUMOURS;

THE MAMMARY ABSCESS, AND SORE NIPPLES OF LYING-IN WOMEN;

OBSERVATIONS ON THE

MORE COMMON DISORDERS OF THE EYE,

AND ON GANGRENE.

THE THIRD EDITION,

REVISED AND DEFENDED.

By MICHAEL UNDERWOOD, M. D.

Physician to Her Royal Highness the Princess of Wales.

ÆQUE PAUPERIBUS PRODEST, LOCUPLETIBUS ÆQUE.

HOR. Lib. i. Ep. 1.

London:

PRINTED FOR J. MATHEWS, N°. 18, STRAND.

M.DCC.XCIX.

BRITISH MUSEUM
30
63
NOV

TO HIS ROYAL HIGHNESS

George

PRINCE OF WALES,

THE FOLLOWING TRACTS

IN A FORMER LINE OF THE AUTHOR'S

PROFESSION,

ARE INSCRIBED, BY PERMISSION,

WITH ALL HUMILITY AND GRATITUDE,

BY HIS ROYAL HIGHNESS's

MOST DUTIFUL,

AND DEVOTED SERVANT,

Michael Underwood.

Great Marlborough Street,

June 22d, 1799.

BRITISH MUSEUM
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THE

Dedication to a former Edition.

TO THE

MASTER, WARDENS,

AND

COURT OF ASSISTANTS,

OF THE WORSHIPFUL

COMPANY OF SURGEONS.

GENTLEMEN,

THAT great Ornament of our Profeſſion, the late *Sir Cæſar Hawkins, Bart.* having honoured the firſt edition of this little work with his approbation, will, I hope, apologize for the liberty I

now take in dedicating this revised edition of it to you, and claiming your Protection.

The Public has long ago had opportunity of deciding on the merits of such parts of it as then appeared; and though their judgment has not been unanimous, (and in what instance has it ever been so?) the Author has had abundant Evidence from his own Experience, and from the testimony of Others, of his labours having been productive of much Good. Nor has the practice he enforced, as far as he has been able to learn, produced the evils some people had apprehended; while the strong manner in which another edition has been called for,

for, is a preſumptive indication of the favourable opinion of Others.

His aim and expectation, from the firſt, was public Good; and he has certainly leſs temptation than ever to inferiour motives, in the preſent publication. His deſire therefore ſtill is, that the work may ſtand upon its own proper merits; and he is now happy in ſubmitting it to a Court every way adequate to forming an impartial and valid Judgment; and deciding upon its future Reputation.

However devoted of later years to another branch of Medicine, the Author is ſtill proud of having re-

received his firſt Education under the Beſt *Surgeon* in the World, and of ſubmitting to the Profeſſion, the reſult of ſome former experience in that line of practice. It were needleſs, therefore, to ſay what Claim You, Gentlemen, have to his labours, ſhould they appear to have any merit, and the Honour you will do him in accepting this Token of Reſpect, from

GENTLEMEN,

Your moſt obedient,

humble Servant,

MICHAEL UNDERWOOD.

Great Marlborough-Street,
October 10th, 1788.

PREFACE

TO THE

FIRST EDITION.

No man publiſhes an opinion to the world, even on the moſt trivial occaſion, without ſome view to himſelf, or others, or to both; and cuſtom has eſtabliſhed an almoſt univerſal law, by which an author is bound either to diſcover his real motives, or to deviſe ſome plauſible, and handſome excuſe for his own boldneſs. The writer of the following ſheets, without affecting any uncommon ſhare of philanthrophy, would not willingly have riſked the favourable opinion

opinion of his friends, had he not been perſuaded, that the practice he has ventured to recommend is founded on the moſt rational principles, and will not fail to be of ſome ſervice to the diſtreſſed. He is encouraged to ſay thus much, at leaſt, having ſeen very conſiderable advantages ariſing from a method of treatment, materially different from that at preſent in faſhion. And if any improvement can be ſuggeſted, in a branch of ſurgery confeſſedly imperfect, (for who will deny that ſore legs are difficult of a laſting cure?) no great apology can be thought neceſſary, for communicating to the world any hints on the ſubject that may be uſeful.

It may add ſome weight to this little performance, to ſay, that it is the reſult of more than twenty years attention and experience; the writer having, for a long time, invited the poor to his houſe, and even common beggars, the moſt intractable of all patients, and ſuch as, either for want of proper food, and clothing, or from

from their diſſolute lives, are the moſt unlikely of all to be cured. He affects no other merit than this attention to ſo limited, and in general ſo much neglected, a branch of his profeſſion; to which he was led, ſo long ago, by an inſtance that fell in his way, of a cure performed with great eaſe, and without confinement, by a very ignorant empiric, after two eminent ſurgeons had failed in the attempt. The knowledge of this at an early period in life, when youth and inexperience prompt to undertake any thing, having convinced him of the poſſibility of ſuch cures, and led him to the knowledge of many, induced him to turn his thoughts to a ſubject, which he has never loſt ſight of. In the mean time, his education under the beſt of maſters, together with his long reſidence in one of the largeſt, and beſt conducted hoſpitals in this metropolis, as well as his attendance in thoſe of *Paris*, gave him ſufficient opportunities of ſeeing, that for one cauſe or other, the knowledge of completely healing old ulcers in the legs, has ever been very deficient and uncertain.

The

The ſubject, though of ſo great importance to the ſuffering individual, has, perhaps, not appeared of ſufficient conſequence to eminent ſurgeons, whoſe employment has uſually been both of a more profitable, and agreeable kind. It is hoped, gentlemen of this claſs, who deſerve and poſſeſs the higheſt degree of public eſteem and confidence, will not think this an injurious ſuſpicion, eſpecially as the mention of it is principally intended, to ſave the writer the mortification of having his firſt attempt thought inferior to the dignity of a firſt rate practitioner. Beſides, any attempt muſt be laudable to reſcue this branch from the hands of quacks and ignorant pretenders, who it muſt be confeſſed, have ſometimes got credit in theſe caſes, where men of ſcience and a regular education have failed. And here it may be proper, as the former claſs of practitioners needs no increaſing, to add, that the preciſe quantities and forms of ſome of the applications hereafter mentioned, are not ſpecified, but left to the judgment of the ſurgeon; who will find no difficulty in pro-

proportioning every active and powerful ingredient, to the nature and variety of each particular caſe, the writer not having the leaſt deſign of concealing any thing from him.

The form, indeed, in which theſe obſervations are preſented, requires more excuſes than the author knows how to make; but he truſts that the plainneſs, or rather homelineſs of their dreſs, will not ſo far prejudice them in the eyes of liberal men, as to prevent their being examined with candour, and made uſe of in practice, if they are found to be at all juſt and rational. A want of regularity and elegance in compoſition, may with truth in this caſe, be imputed to want both of experience, and leiſure to ſtudy the correctneſs and embelliſhments of language. He has, indeed, no pretenſions as a writer—but though truth may be adorned by a florid ſtyle, or enforced by elegance of argument, the greateſt deficiency in theſe ornaments cannot invalidate facts, nor juſtify

tify an ill-natured criticiſm, on that which made no part of the author's deſign.

As to the mode in which theſe obſervations are preſented, the preſent was judged the moſt likely to anſwer any good end, for though what the author has to ſay in point of directions, might have been expreſſed in a ſmaller compaſs, or have appeared in ſome periodical publication, he could not, in ſuch a channel, ſo fully ſupport the principles he has laid down, nor juſtify his deviation from eſtabliſhed authorities. He knew, moreover, that an attempt had been made in that way, by a gentleman of acknowledged abilities,* which did not ſeem to gain the attention of the public.

With regard to the few hints on ſcrophulous affections, and other matters ſlightly touched upon, they are likewiſe the reſult of ſome experience: how far they are worthy the attention of the pub-

* *Mr.* Else, *Med. Obſerv. and Inquiries, Vol.* iv.

lic,

lic, is cheerfully ſubmitted to their conſideration.

The author, however, begs leave to urge again his good intentions, and to expreſs his hopes, that the ſucceſs of his plan may, in other hands, be equal to his own; and then he ſhall expect the ſatisfaction of having contributed very greatly to leſſening the difficulties and diſtreſſes of many afflicted fellow-creatures; preſerving ſome of them from leading miſerable lives; and now and then preventing that moſt dreadful remedy for bad ulcers, the loſs of a limb.

PREFACE

TO THE

SECOND EDITION.

THIS ſecond edition appears before the Public with fewer emendations, in point of ſtyle and manner, than might have been expected. But the author having been called to turn his thoughts ſomewhat another way, and to other publications, really has not found time ſince a ſecond edition has been much inquired after, to pay ſufficient attention to it. Indeed, without an entire change of plan, and new arrangement of matters, no adequate alterations, in theſe reſpects, could be effected; although he hopes there are others of

of much more importance to the ſtudent. Beſides, he is ſtill of opinion, that, on account of the doctrine being ſo oppoſite to former practice, and ſome prejudices to it yet remaining, an attempt to abridge the work very much, by ſimply objecting to the lenient plan, and merely ſtating his own, would not be the beſt method of combating inveterate prejudices, or likely to eſtabliſh a new mode of practice, as yet unſupported by great Names. The like reaſon, it is hoped, may apologize for continuing the long references and quotations from the ancients, which might otherwiſe have been omitted. He has, however, made a few corrections; has abridged and tranſpoſed ſeveral parts, and made conſiderable addition to others, in the tract upon ulcers; as well as attended to every objection that has come to his knowledge. The latter eſpecially, he thought incumbent upon him, as it is probable he may not take up his pen again on chirurgical ſubjects; and he hopes he has executed it with modeſty, though with a firmneſs becoming the defence of a mode

of practice, which he conceives to be juſtified as well by theory as experience.

IT was in deſign, indeed, to have made ſome further Diſtinctions of ulcers, in order to aſſiſt young practitioners who may take up the plan; but he has not been able to do it to his mind. Some progreſs, indeed, might eaſily have been made, but too many difficulties occured to admit of a complete arrangement, with ſufficient clearneſs for any good, practical uſe. Such ſpecific diſtinction may, however, be made, and the careful obſerver, determined to purſue and profit by theſe hints, will not long be at a loſs for it; but it will be beſt attained by experience. For, beſides the peculiar ſymptoms attendant upon different ulcers, another diſcrimination is often neceſſary, which is ſo much an object of ſenſe, that it can be conveyed but very imperfectly in words. For apart from the obſcurity ariſing from the fluctuation of language, there are certain things of which words can convey no adequate ideas, however clear thoſe of the writer may be.

Archi-

Architecture (if ſuch an alluſion might be allowed of here) furniſhes an ample proof of this: for what words could have given any accurate conception of ancient buildings, (of which no drawings were preſerved) had not their Ruins remained? But from theſe, conveyed by the Pencil's ſiſter-art, ancient *Greece* and *Rome* are every where preſented to view, and modern buildings riſe in *Aſiatic* or *Gothic* magnificence.

From the difficulties neceſſarily attending ſuch an attempt in the preſent inſtance, it is hoped, the reader, deſirous only of practical information, will be ſtill ſatisfied with the two former general diſtinctions of ulcers. Daily experience, it has been ſaid, will render familiar to him others of leſs importance; will enable him to make a practical arrangement; and from the directions laid down, to ſelect the treatment beſt adapted to every claſs he may make for himſelf.

THE author would think himſelf happy if only the above objections might be made

to the work; but he has to lament, that there are yet individuals of high rank in the profeſſion, who ſatisfy themſelves with giving their teſtimony altogether againſt a plan of which they have not been pleaſed to make a trial, either in their private or hoſpital practice: though it can be proved, that where their plan perſevered in for ſeveral months, has done nothing, a cure hath been eaſily and ſafely effected upon this. It has, indeed, met with ſufficient ſupport elſewhere, and the author received both from abroad, and from different parts of this kingdom, the repeated thanks of many practitioners with aſſurance of its great ſucceſs in their hands.

It is with concern, however, he has to obſerve, that it is not likely to prove ſo beneficial in *hoſpitals* as to private patients; it being impoſſible ſurgeons ſhould viſit the former every day, much leſs dreſs every bad ulcer with their own hands. Such ſores muſt, therefore, be committed to pupils, many of whom come to *London*, and, indeed, too many leave it, poſſeſſed of ſo little

little knowledge or attention, that whenever any matter muſt be ſubmitted to their diſcretion and care, (of which the application of tight bandage is a moſt important one) it is well if patients do not conſtantly ſuffer by it. Not that the plan, indeed, is incapable of very extenſive uſefulneſs, even in hoſpitals and diſpenſaries, if ſurgeons would do their part in ſuperintending and directing the pupils, ordering proper rollers, and adviſing patients to walk; and eſpecially, would they become leſs timid in their uſe of the precipitate. As an inſtance, the author has Mr. PEARSON's permiſſion to ſay, that ſince the winter of 1783, ſome hundred patients have been cured upon this plan, under his direction, at the *Lock-Hoſpital* and *Carey-Street Diſpenſary*; many of whoſe ulcers were very large, ſome extending nearly round the leg, and of many years ſtanding.

BUT howſoever the peculiar advantages of this plan may, in any inſtance, be leſſened, it is ſubmitted, with increaſed con-

fidence, to the attention of practitioners of every rank, which the writer feels himſelf juſtified in doing, by the beſt of motives—from the benefit it has afforded to ſo many poor ſufferers ſince the former edition appeared.

Agreeably to theſe aſſertions, he could refer to various other teſtimones he has received ſince the former edition of this work. Out of theſe, however, he has ventured to ſelect a letter, (not more flattering than many others) which howſoever regarded in reſpect to himſelf, he has thought it a juſtice to the Public to ſubjoin to this preface. It were unneceſſary, it is hoped, to ſay, that it is preſented in the writer's own words, as well as with his conſent: and as its compliments would be very lightly eſteemed by the author of this work, ſhould their effects only terminate in himſelf, ſo ſhall be any cenſure to which the publication of them may expoſe him, ſhould other practitioners be excited to make a like fair trial of a plan, which he is perſuaded will exceed their warmeſt

warmeſt expectations, and ultimately benefit mankind.

DEAR SIR,

MY time has of late been ſo much engroſſed by buſineſs, that I have not till now had an opportunity of anſwering the laſt letter you honoured me with—You wiſh to know if the ſame ſucceſs attends me in purſuing your plan as that I had the pleaſure of communicating to you, at the commencement of our correſpondence. I cannot ſay it is the *ſame*, Sir—it ſo much exceeds my moſt ſanguine expectation. I have really often been aſtoniſhed at the *Eaſe* with which I cure old and large Ulcers of the Legs, by a ſtrict adherence to the rules you have laid down, after they have withſtood every other mode I had been previouſly acquainted with.

It was this continual diſappointment that firſt led me, though prejudiced, *a priori*, againſt

againſt the plan recommended in your Treatiſe, to give a fair trial to it; and accordingly I took it up early in the ſummer of 1783.—I have perſevered in that plan ever ſince, and it now conſtitutes almoſt the *whole* of a very *extenſive* buſineſs. And I muſt declare in juſtice to you, that in the numbers I have cured, I have never obſerved any inconvenience following the *ſuppreſſion of a diſcharge*, that could be in the leaſt attributed to the running being ſtopped—And having been myſelf equally *fearful* with other practitioners of the *bad effects* ariſing from *the cure* of old ulcers, I have been *particularly attentive* to *this* circumſtance, till aſſured by long experience, that upon your plan, my fears had been groundleſs; while the Eaſe with which I have cured ulcerated legs of every kind, and of every period of duration, from one to thirty years, in more than two hundred inſtances; and the *few relapſes* which have ſucceeded, convince me, (and will, I doubt not, every other practitioner who will give your plan a fair trial) that it is the only

one

one on which the cure of Ulcers of the Legs ought to be attempted.

Wiſhing you may long enjoy, &c. &c.

I ſubſcribe myſelf, with the moſt

reſpectful eſteem,

SIR,

Your obedient,

humble Servant,

T. SMYTH.

CHERRY ORTON,
near Peterborough
Jan. 11th, 1787.

PREFACE.

TO THE

THIRD EDITION.

CONCERNING this third Edition it is proper to obſerve, that having ſince the former, entirely declined the practice of ſurgery, and conſequently any attention to ulcers on the legs, except in occaſional conſultations; I can now have very little new to offer. The want of leiſure, moreover, to reviſe minutely the ſubſequent pages; though it be to repeat a former apology,* is the beſt I have to offer for their various contents appearing again ſo nearly in the form they have done before; and with only the ſlighteſt additions to certain parts; and ſome of them the reſult of reading rather than experience,

* *See the preface to the 2d edition.*

IT

It is on both theſe accounts, that the work has been long out of print, though repeatedly inquired after: but more eſpecially has every ſolicitation been declined during the laſt year, from the appearance of a ſingular method of treating ulcers on the legs; which from the writer's own ſucceſs, I conceived might poſſibly ſuperſede a re-publication of mine. And had I at this time reaſon to retain the favourable ſentiments I had formed, I moſt certainly ſhould not intrude upon the public a new impreſſion howſoever ſolicited. But from the beſt information I have been able to obtain, the application of Mr. Baynton's plan to *large* ulcers has not been ſucceſsful in the hands of other practitioners; and the *opprobium chirurgorum* ſtill remains. It is probable, however, that the ingenious device of the author will have its uſe in many ſores of a moderate ſize, particularly about the ankle, as well as in ulcers attended with a varicoſe ſtate of the extremities: and in the hands of intelligent and careful practitioners, may form a very excellent auxiliary

auxiliary* to the plan which I now ſubmit anew to the public; not without ſome additional vouchers to its ſucceſs.

ANOTHER treatiſe on this ſubject, by an ingenious writer and practitioner, claims a reſpectful attention, and promiſes likewiſe no inconſiderable aſſiſtance to ſuch ſurgeons as have adopted my plan; who will, I am perſuaded, find themſelves amply rewarded by an attentive peruſal of his work. Mr. HOME's *Obſervations on the Treatment of Ulcers on the Legs*, which appeared ſoon after Mr. BAYNTON's; beſides many excellent practical diſtinctions of ulcers, recommends a variety of well adapted topical applications; forming a better claſſification of ulcers,† and their appropriate remedies, and exhibiting more of ſyſtem, than has

* This, indeed, I have myſelf been witneſs to in a late inſtance—Whether *Mr. Simmons* of *Mancheſter*, who has taken up *Baynton's* plan with certain exceptions and modifications, expects much more from it, is not perfectly clear from the *obſervations* publiſhed the laſt year in *Duncan's Annals of Medicine*.

† The younger readers of the preſent edition may hereby be glad to find that defect in this treatiſe very materially ſupplied.

for

for many years been attempted. Mr. HOME, however, entertains a leſs favourable opinion than might have been expected from a gentleman of his extenſive practice, and application, of the important article which I am ſatisfied from experience, is indiſpenſible to the certain and ſafe healing of old ulcers on the legs, and applicable in every ſpecies with which I am acquainted. And were Mr. HOME induced to allow his patients to walk abroad during their cure, I am perſuaded he would find a tight bandage more ſuitable to every kind of ulcer, than he has ſuſpected, when not in an inflamed ſtate; for during that ſtage, reſt is, indubitably, to be enjoined, and a tight bandage often equally unneceſſary and injurious.

IT may be no improper concluſion to this preface to obſerve more particularly, that beſides the author's former experience; the teſtimonies he has ſince received, as well from abroad as from various parts of this kingdom, to the beneficial effects of the plan firſt ſubmitted to the public fifteen

fifteen years ago; ſatisfy him, that whatever other means may be, in ſome inſtances, neceſſary to the cure of old ulcers on the legs, he is juſtified in offering it again, howſoever precluded from any advantages of minute correction, or protracted practice.—Nor can he avoid adding again, that he muſt lament its not having hitherto been more *generally* adopted, both in public and private practice.—It muſt perhaps ſometimes fail, as every remedy has done; although in a more limited ſphere, it has been ſo generally ſucceſsful. But would hoſpitals aſſiduouſly take up this plan, much good *muſt* be done; and the author cannot but ſtill hope, that after he ſhall be unable to invite them to it, practitioners will be found who will have courage enough to forſake the *via trita* and the lenient plan, and improving upon theſe outlines, will ſurpriſe their brethren by ſafely healing old ulcers hitherto deemed incurable.

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INTRO-

ERRATUM.

Page 287, line 5, for rigour, r. rigor.

INTRODUCTION.

THERE are ſome diſeaſes which derive their importance, not ſo much from their fatal tendency, as from the pain and uneaſineſs they occaſion. Stationary ulcers in the legs, may be juſtly ranked under this claſs. In general, we do not eſteem their cure eſſential to life; but he who is the unhappy ſubject of them can beſt eſtimate, how much the comforts and enjoyment of it are impaired by them.

A variety of obſervations might be made on the ſeveral peculiarities of theſe ulcers; but it is, by no means, the deſign of this work to intrude upon the reader with theory on the nature of the complaint, any further than it may be neceſſary, in order to eſtabliſh the means of a ſafe, and laſting cure.

In this view, it will be proper to drop a few words upon ulcers in general, and on ſome material differences between thoſe now to be conſidered, and all other ſores; between recent wounds of the legs, occaſioned by ſome accident, and thoſe made on any other part of the body: ſome reaſon there muſt be, for the additional trouble in healing the former, as well as the greater difficulty with which they are afterwards preſerved in that ſtate. This is eſſentially neceſſary if we would eſtabliſh a rational practice, and ſo far as this end is kept in view, it is hoped, an attempt will not be accounted ſuperfluous.

It ſcarcely needs to be obſerved, that ulcers may be occaſioned either by every external accident abrading the ſkin,* or bruiſing the parts underneath, in a certain habit of body, prediſpoſed to ulceration; or by any internal cauſe,† exciting ſuch inflammation in a part as ſhall incline it to ſuppurate, though no external injury has been received; ſuch are fevers of different kinds. To theſe ſhould be added neglect, or miſmanagement, when an

* Ulcus eſt continui ſolutio ab eroſione facta.—GALEN.

† Ulceris cauſæ vel internæ ſunt, vel externæ.—PAREY.

abſceſs

abſceſs is formed, by which a ſimple wound is converted into an ulcer, or continual ſore of the part.

Theſe are briefly the cauſes of ulcers in general, and where no ſpecific contagion prevails in the habit, are all that need to be conſidered.

In thoſe of the legs, indeed, we are further led to remark the ſtate and circumſtances of the limb, which being a depending, and an extreme part of the body, may be regarded as a particular and prediſpoſing cauſe. Its being an extreme part, appears to have a much greater influence than has generally been imagined, or at leaſt expreſſed by writers on this ſubject; and tends very much to account for the frequency of the diſeaſe, and to point out an indication of cure, which in practice has been entirely overlooked.

It being the author's deſign fully to inveſtigate this ſubject, it will be proper, previous to entering upon the cure, to make ſome obſervations upon ulcers in general, enlarging a little on ſome peculiarities attending thoſe on the lower extremities.

§ Authors of credit* have uſually defined an ulcer to be a ſolution of continuity in a ſoft part, diſcharging a purulent, or ichorous matter.†

But the proceſs of ulceration conſiſts in more than a ſimple ſolution of continuity; there is a real loſs of ſubſtance in the ulcerated part. To obtain therefore a more correct definition, I would be underſtood to mean by an ulcer, a ſolution of continuity in a ſoft part of the body, from which an ichorous, purulent, ſanious, or vitiated matter is diſcharged; attended with a loſs of ſubſtance in the part.‡

This

* HIPPOCRATES excepted, who calls any ſolution of continuity by that name.

† WISEMAN, TURNER, BELL.

" Partis mollis ſolutio purulenta, vel ichoroſa." CULLEN.

Les ulceres ſont des ſolutions de continuité dans les parties molles, avec ecoulement de pus." *Traité des Tumeurs et des Ulceres.*

‡ SENNERTUS and HOFFMAN give nearly this definition—" Ulcus dicitur ſolutio continui cum imminuta magnitudine, in parte molli, a materia erodente ortum habens. Differunt nimirum in eo vulnus et ulcus, quod in vulnere ſaltem eſt ſoluta unitas, nihil verò neceſſario de parte amiſſum eſt; in ulcere verò ſemper aliquid de parte affecta imminutum et amiſſum

This character may be very applicable to ulcers in general, and be quite ſufficient as a diagnoſis; but many important diſtinctions are to be attended to, which muſt have conſiderable influence in the treatment. It will be ſufficient, however, to hint at a few of them.

I. An ulcer may be ſimple, ariſing from external cauſes merely.

amiſſum eſt, ſi non plus, ſaltem cuticula." SENNERTUS. *lib.* 5. *pars* 2. "Sunt autem ulcera partium ſolidarum, atque mollium cum cavitate quadam minori, ichorem tenuem, ſalſum et acrem fundente, diſſolutiones et eroſiones a ſero extravaſato, et corrupto originem ducentes." HOFFMAN, *cap. vi.* § 1.

It is evident however, that HOFFMAN, SHARP, and ſome later writers, deſign moreover by an ulcer, an old, or ill-conditioned abſceſs; and there ſeems to be ſome reaſon for this diſtinction, if we would ſpeak with preciſion; for otherwiſe, every impoſthumation, when burſt or opened, as well as every wound after an operation, is equally an ulcer—HOFFMAN's words are, "Differunt ulcera ab abſceſſibus, tum in hiſce major, quam in illis deprehenditur cavitas, atque non tam ſanies aquoſa, ſalſa et acris, quàm potius pus laudabile, bene coctum à ſanguine, in partibus muſculoſis ſtagnante, et mora corrupto, gignitur; licet negari minime poterit, ulcera ſæpe ex apoſtematibus oriri, quæ in principio meri fuerunt abſceſſus." § 2.

II. It may be the conſequence of, or be connected with a bad habit of body; or,

III. It may be owing to ſome ſpecific contagion.

IV. The ſituation alſo of ulcers deſerves our attention. They may affect the ſurfaces of parts, in the manner of an eryſipelas; or partake more of the nature of a phlegmon, by being ſeated in the ſubſtances of parts.

But it will be neceſſary in this place to remark other diſtinctions, noticed by the beſt writers.

I. An ulcer, it has been ſaid, may be of ſuch a ſpecies, that it will not admit of cure.* This, however, cannot often be the caſe, and belongs not to the preſent intention.

II. The ulcer may ariſe from, or be accompanied with ſuch a peculiar ſtate of the conſti-

* Cancerous, &c. "Ulcera Hydropicorum vix imo ne vix curantur." HIPPOC. *Lib. vi. Aph.* 45.

tution,

tution,† that the patient may be unable to undergo ſuch a diſcipline, as will be abſolutely neceſſary to its cure.

III. A patient's ſtate of health, or peculiar circumſtances in life may be ſuch, that the injunction of confinement and a recumbent poſture cannot be complied with.‡——The preſent inquiry will be more immediately directed to the treatment of ulcers occurring under theſe laſt-mentioned circumſtances; and as the lenient method is generally injoined with an horizontal poſition of the limb, they will both reſpectively fall under conſideration.

§ Ulcers troubleſome in themſelves, or of long ſtanding, are very often brought into a healing ſtate, by mild means, and abſolute reſt, where no cachectic diſpoſition exiſts.‖ If the patient after this ſhould live freely, or uſe much exerciſe, it is highly probable the ſore will break out again. In ſuch a caſe, it may be ſaid the perſon has been cured, but he is not reſtored to ſociety. A very natural inquiry ſuggeſts itſelf here, viz. Is this the only

† SHARP's Surgery. *Introduct. page* 29.

‡ Ib. *page* 38.— ‖ Ib. *page* 31.

rational method of treating ſuch ulcers?—If it can be proved, that a ſtrict courſe of regimen is generally unneceſſary, and that abſolute reſt is often not only needleſs, but prejudicial; if it can be demonſtrated, that by a different mode of treatment, they may be as certainly, and often as ſpeedily cured, and without danger of relapſe; it becomes a ſubject, highly deſerving the attention of every practitioner.

§ It has been obſerved, and long been a decided opinion, that wounds or ulcers, ſituated on the lower extremities, below the knee, do not generally heal ſo kindly as thoſe on the upper parts of the body.* Various reaſons have been aſſigned for this laſt-mentioned fact; and as principles are more or leſs connected with practice, it will be very proper to glance at this ſubject, which will bring forward the immediate object of inquiry.

Theſe extremities being depending parts, a ſtagnation of the circulating fluids has been offered by ſome as an explanation; whilſt

*, It is a maxim in ſurgery, that abſceſſes and ulcers will have a greater or leſs tendency to heal, as they are higher or lower in the body. SHARP's Surgery. *Introduct. page* 17.

others

others have attributed it to a deſcent of depraved or vitiated humours.*

It is ever of the utmoſt conſequence, to ſeparate facts from hypotheſes. Our knowledge is actually increaſed by the one; we are not certain gainers by the other. Effects are obvious to every attentive obſerver, but cauſes are often latent and dubious.

The firſt theory cannot be admitted; as its proximate cauſe is, by no means, a conſtant attendant on ſore legs: Œdema ſometimes precedes, ſometimes accompanies, and often ſeems to be a conſequence of ulcers, but is only one evidence amongſt others, of cachexy.

* See WISEMAN, TURNER, SHARP.

GALEN. *De Ulceribus malignantis Naturæ.* "Talia enim appello, in quibus aut pars affecta tam vitioſo habitu eſt prædita, ut vel optimum ſanguinem, qui nutritionis gratia confluit, corrumpat: aut id quod influit, adeo perverſum exiſtit, ut etiamſi pars rectè ſe habeat, ab ipſo tamen ſolo erodatur." (*De comp. med. lib. iv.*)

AMBROSE PAREY, on the cacoëthic ulcer, copies after *Galen:* "influentem corrumpit humorem," (ſays he) and on the cachochymia—"propter influentis ſanguinis, partem exedentis, pars affecta nimium humida non coaleſcit." *Lib. xii. cap. x.*

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The ſecond enumerated cauſe ſtands merely on an hypothetical baſis. 'Till we get more diſtinct ideas of what is meant by vitiated, or depraved humours, and have their exiſtence demonſtrated, it ought not to be admitted as the occaſion of the difference in queſtion; eſpecially as this difference is capable of being very conſiderably leſſened, merely by topical applications and exerciſe, as will be ſhewn in its proper place.

§ Without preſuming abſolutely to remove the difficulty, a few hints on the ſubject may not prove unworthy of attention.

I. The living power of the animal exiſts in greateſt quantity neareſt the heart. In proportion to the different diſtance of parts from this centre of life, the circulation of the blood is more languid, the animal heat is at a lower temperature, and the animal functions are more liable to interruption. But the healing powers depend greatly on the general, or relative vigour of the ſyſtem: if therefore, the vital energy diminiſhes, at a diſtance from the centre, ſhall we be ſurpriſed to find, that the vis medicatrix (which owes its

its ſalutary power to the ſame cauſe) is diminiſhed likewiſe?

II. In the lower extremities there is diffuſed much tendinous or ligamentous membrane. This kind of ſubſtance, though not void of ſenſibility, poſſeſſes a very ſmall ſhare of it; its blood veſſels are ſcarcely viſible unleſs rendered ſo by diſeaſe, and in that ſtate it acquires a high degree of irritability. The ſtructure of the parts therefore, may in ſome caſes, have conſiderable influence in retarding the cure of ulcers. And perhaps the depending poſition of the limbs, though not ſufficient of itſelf, may in ſome degree co-operate with other cauſes in producing the evils complained of.

When an ulcer on the lower extremities, tolerably free from inflammatory ſymptoms, and unconnected with cacoëthic, or ſpecific affection of the ſyſtem, becomes intractable under the moſt prudent management, it is highly neceſſary to know the cauſe: inquiſitive men have, indeed, aſſiduouſly inveſtigated it, but to how little purpoſe, the ſucceſs, or rather the want of ſucceſs in general practice, too evidently demonſtrates.—I have ventured

to

to ſuppoſe, that the moſt probable cauſe is a defect of vital energy, either general or local. If general, which it is of importance, indeed, to determine, and an atonic ſtate of the ſyſtem prevails, that plan muſt be purſued, which is moſt likely to produce a ſtate of general ſtrength; but if the cauſe be merely local, our views muſt be very different. It muſt then be treated as a diminution of action in the part. Not that it is meant to ſuggeſt, that thoſe two cauſes cannot exiſt together; they very often meet in the ſame ſubject: but it is proper to obſerve, that they may, and often do exiſt ſeparately. Nor are we to conclude, that becauſe our treatment has a tendency to ſtrengthen the patient, the deſired end will always be obtained. There may be a ſufficient quantity of power in the conſtitution to overcome a diſeaſe, though that power be not fully exerted. It is often neceſſary to rouſe nature to action, by the external uſe of ſtimulants. But in doing this, it will be well to obſerve, that as we have a certain end in view, our means muſt be adequate. Stimulating applications may be ſo uſed, as to fret or irritate the part, without the leaſt good effect, nay, with very bad effects. If the power and action of the part be not rendered ſuperior to the diſeaſe, every

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ineffectual effort of nature will increaſe it, and conſequently retard the cure.

Perhaps, the irritation ariſing from motion, may in this view, be accounted one kind of hurtful ſtimulus, when applied to ulcers on the lower extremities. A perſon affected with this kind of ſore, though he ſhould not entirely confine himſelf, will be diſpoſed to walk leſs than uſual, and to give the leg ſome little indulgence. The ſtimulus, thus irregularly applied, excites the veſſels to an increaſed action; pain becomes conſiderable; the ſurrounding parts are inflamed; and the diſcharge is increaſed.—He reſts.—Nature was making efforts to give a new ſurface to the ulcer, but the ſtimulus which excited her to action being withdrawn, her attempts are partial and ineffectual. And as more or leſs of loſs of ſubſtance, always precedes the ſhooting of granulations, perhaps only the firſt part of the proceſs is completed; hence the ulcer is more foul, is deeper, and more extenſive than before. All theſe evils are attributed to the motion of the part, and abſolute reſt is deemed a neceſſary requiſite towards obtaining a cure.—Whether this be as evident as it hath been generally imagined, is a mat-

a matter very much to be doubted indeed, and is worthy of further inquiry.

§ It appears then to be rational, as well as agreeable to experience, to ſuppoſe, that, neither the only, nor yet the chief obſtacle to the healing of ulcers can ariſe from the legs being depending parts of the body, but as hath been obſerved, from their being extreme parts, where the circulation is leaſt vigorous. Hence it is, that the complaints of younger people are chiefly confined to the head and upper parts of the body, which at a more advanced age uſually affect the lower; and it frequently happens, that ſuch as have had diſorders of the eyes when young, are afflicted with fiſtulæ in ano, or ſore legs, when they grow older; the circulation of the blood through the more extreme parts, and their conſequent tone, being then impaired: and every ſurgeon knows how much more frequently a gangrene is found to ſeize the feet or the toes, than any other part of the body. For although the fingers, with their veſſels equally ſmall, are at a conſiderable diſtance from the heart, yet the circulation in them is more vigorous, both on account of their veſſels coming from the beginning of

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the aorta, and the continued exerciſe from their more conſtant uſe. The lower extremities being ſtill further diſtant, and not ſo much engaged, have theſe diſadvantages compenſated by the exerciſe nature has impoſed upon them, in the ſupport and conveyance of the whole body; for the want of which neceſſary ſtimulus, in indolent and ſedentary people, the circulation becomes too languid to preſerve their due tone. From this cauſe, as well as from the anatomy of their parts, it is eaſy to account for the ſwelling of the feet and ancles, ſo common in ſuch perſons, as well as for that which happens from the limb having been kept, for any length of time, in an horizontal poſition: for here, whilſt the *moles movenda* is great, the *vires moventes* are diminiſhed. It is therefore preſumed, that exerciſe being ſo neceſſary to ſupport general health, and particularly the vigour of the extremities themſelves, is ſo far from being poſitively detrimental, that under proper management, it muſt prove conducive to the healing of ulcers ſituate upon them. Hence it will appear to be the province of art, to deviſe ſome proper means to regulate the effects of exerciſe, rather than to aim at a cure ſome other way, by ſubverting the order of nature, and depriving the patient, for a time, of a

neceſſary

neceſſary mean of ſupporting, or recovering his health; which pernicious cuſtom, it is preſumed, is one principal occaſion of the difficulty in queſtion.

It may be neceſſary to pauſe here, to take ſome notice of certain objections made to this mode of reaſoning, particularly by the *Editors* of the *Critical Review*. It ſhould ſeem, that ſome of their ſtrictures have ariſen either from my having expreſſed myſelf inaccurately, or from ſome miſtake on their part; or it is not likely they would have adduced the inſtance of the diviſion of the ſacro-ſciatic nerve of a frog, in oppoſition to the theory I had ventured to advance. By this inſtance they would intimate, that great nervous energy is not ſo neceſſary in order to the healing of ulcers on the lower extremities, as I am ſuppoſed to have imagined; and that "my "theory is therefore fallacious, and the con-"ſequences drawn from it, erroneous."

I ſhall not ſtop here to make any remarks on the cold blood of this aquatic, as rendering it an improper inſtance for illuſtrating the ſubject in diſpute; but ſhall only point out what my poſition has uniformly been, viz. that the circulation of the blood in the lower extremities

extremities is too languid for the purpoſe of due incarnation, and the ſpeedy healing of ſores ſeated upon them. That ſuch a languor actually exiſts, beſides a variety of other evidences, is demonſtrable from the vaſt coldneſs of the feet and toes of people of a delicate habit; in whom, indeed, they are ſeldom warm but in the hotter months. The fact is certainly incontrovertible, the vis vitæ is actually leſs than in ſuperiour parts; and wounds occaſioned merely by accident, and under every favourable circumſtance of age, conſtitution, &c. and brought into a good ſtate, are found to cicatrize more ſlowly than on other parts of the body: whilſt no wound heals ſo ſoon any where as on the head, let the natural conſtitution be whatever it may. As to nervous influence, which the objection alludes to, there may be enough of it, of a certain kind, for any thing I know, and perhaps often more than we wiſh for; no ſores being more irritable than thoſe of the legs. And if I have appeared to intimate, that the lower extremities are enervated, it was intended in ſuch a ſenſe only as to denote their atonic ſtate, for want of a due vis vitæ, a fact not to be denied; and I have no doubt, has for its cauſe the languid circulation in the parts. This, as well as every other inſtance

of the animal economy is, indubitably, wiſe and ſalutary on the whole, though it will not follow that it is conducive to the healing of ulcers ſo circumſtanced; and will ſerve to illuſtrate the propriety of a meaſure of that exerciſe which nature has evidently deſigned the legs to ſuſtain, and which is ſo much inſiſted upon in the courſe of this work.*

§ The nature of the ulcerative proceſs next deſerves our conſideration. When from ſome

* The idea of a defect of vital energy in the part, has lately met with further ſupport from experiment, or rather from facts; which being aſcertained by a gentleman in no wiſe concerned in this diſpute, may, perhaps, have more weight than if ſuch experiments had been made merely under my own eye.

Mr. PARTINGTON did me the honour of informing me, that as ſoon as he had peruſed my treatiſe, he tried the effect of electricity upon ulcers of the legs, ſcrophulous ſores in the neck, and upon chilblains, whilſt they were under the care of ſurgeons of eminence: and that both they and Mr. *Partington* were ſatisfied of its good effects in expediting the ſeveral cures, in conſequence of its local influence and ſtirring up the vires medicatrices in the parts. Upon the ſame principle, I apprehend, it has been found ſucceſsful in many cutaneous diſeaſes, improperly aſcribed to acrimony, and other obſcure qualities prevailing in the ſyſtem, which are rather owing to a diminiſhed vital energy, or to a morbid action, in the part.

cauſe,

cauſe, external or internal, ulceration takes place, a very uſual way of accounting for this ſolution of continuity has been, that there is a melting down of the ſoft parts into pus, ſanies, &c.* Experiments on dead and living ſubjects have been made to prove this; yet it is apprehended, this proceſs never takes place in the living body; it is a proceſs that contradicts every thing we know of the animal economy, and the obſervations of the moſt accurate phyſiologiſts.

The perfect ſolution of a ſoft part, even when removed from the body, is not eaſily effected by art, unleſs it be immerſed in cauſ-

* "Vaſcula diſtenta rupta cum dolore, calore, pulſu, liquores ſuos effundunt, ſolvunt, putrefaciunt leviter, ſolida tenera atterunt, ſolvunt, fluidis miſcent in unum ſimilem album, ſpiſſum, glutinoſum, pinguem humorem, pus dictum." BOER. *Aph.* 387.

"Pus or matter is certainly no natural ſecretion.—I believe I may venture to affirm, that the diſſolution of ſome of the ſolid particles of broken capillary veſſels, and a mixture of ſome part of the juices that ſhould circulate through them, makes a neceſſary part of the production. Mr. POTT. *vol. i. p.* 315.—The fallacy of this ſentiment has ſince the former editions of this work been ſo ably ſet forth by ſome late publications of Phyſiologiſts, that it muſt be needleſs to enlarge on the ſubject.

tic liquors, much leſs have we ever ſeen muſcular fleſh, and cellular membrane converted into a fluid reſembling pus. Simple diviſion of a living fibre does not neceſſarily produce the death of that fibre; but decompoſition, either by the putrefactive fermentation, or by art, never can take place without depriving the affected part of its life. Moreover, as the purulent matters diſcharged by ulcers, differ in their chemical properties from dead animal fibres in a ſtate of diſſolution, we are certainly not authorized to conclude, that there is a ſimilar arrangement of particles. Beſides, we ought to find the moſt profuſe diſcharge from an ulcer during the exfoliation of its ſloughy covering; whereas the reverſe of this is really the caſe: an ulcer never pouring out ſo large a quantity of good matter, as during a few of the firſt days after its ſurface has become clean. And every practitioner muſt recollect having ſeen caſes, where the dimenſions of an ulcer have been increaſed to twice its ſize, in the ſpace of a few hours, without ſuch a proportionate increaſe of the diſcharge, as we ought to expect under the idea of diſſolution.

The proceſs of ulceration ſeems to be a certain act of the abſorbent ſyſtem, whereby in

in conſequence of a ſtimulus, it takes up the ſoft parts, and carries them into the circulation.* No anatomiſt can doubt the poſſibility of this, when he conſiders, that ointments, and even powders are readily abſorbed, eſpecially where there is a want of cuticular covering.† If this account of the matter be admitted, we ſhall be aſſiſted in underſtanding the cauſe of the rapid progreſs of ulceration, the exfoliation of dead ſoft parts, and deſquamation of carious bone.

Since this tract firſt appeared, it has been objected to this idea of ulceration, that it is a doctrine as yet by no means eſtabliſhed, and although there certainly doth exiſt in the animal body a power of abſorbing its own conſtituent parts, yet it cannot be proved that this abſorption is always attendant upon ulceration; nor is there any reaſon that prevents us equally from ſuppoſing that ulcera-

* Phyſiology, I believe, is indebted to the late ingenious Mr. HUNTER for this no leſs probable, than curious idea.

† See Mr. CRUIKSHANK's letter on the abſorption of calomel; to whom the world is no leſs indebted for his indefatigable attention to, and uſeful diſcoveries in the abſorbent ſyſtem.

tion may be the effect of ſome external corroding power, the nature of which is unknown to us.

Such an obſervation certainly deſerves a ſerious attention, and I do not know that any thing I have advanced is directly inconſiſtent with it. On the other hand, it is conceived, that the increaſed dimenſions of ulcers depend very much upon the retraction of the ſound parts. I pretend to no great phyſiological knowledge, and never intended to inſiſt upon the extent of the abſorption to which I have alluded, or have attempted to prove that it always takes place in ulceration; I have only contended that the idea of Mr. HUNTER (as far as I have adopted it) appears to me truly ingenious, and far preferable to that of parts being melted down into pus; againſt which, at leaſt, I imagine ſome arguments are advanced that will not eaſily be overturned.

It is very probable, indeed, that the animal juices when extravaſated, may acquire ſuch an acrid quality in a diſeaſed part, as may deſtroy that coheſion of parts neceſſary to their life, and may ſo change them that very little of them may be ſeen; though the whole of them may not be taken off by the abſorbents.

It

It is certain, that the conſtituent parts of animal bodies when reduced to their firſt principles are but ſmall in quantity, and when the body is ſo reduced by putrefaction after death, the quantity of earth and water is but very inconſiderable. But whatever analogy to this putrefactive principle the juices may acquire during life, ſo as to be capable of mutilating the parts, it will by no means follow, that they are ſo changed as to be turned into pus; for not only is the diſſolution here ſpoken of, the effect of diſeaſe in the juices, but is ſuch as muſt reduce the parts to their firſt principles, at leaſt in a conſiderable degree, and exiſts only in a foul and bad ſtate of the ſore; whereas the formation of pus, eſpecially of laudable matter, depends on the healthy ſtate of an ulcer, or the due action of the veſſels, and is uſually an indication of a favourable iſſue. So that, whatever corroding power there may be, whether internal or external, it can, by no means, account for the kindly ſuppuration of abſceſſes and ulcers, where the parts are ſuppoſed to be melted down into pus: an idea, as I conceive, unbecoming a thinking mind, as it ſuppoſes ſomething utterly unlike every thing elſe of which we have any probable evidence in the animal economy; and which was, indeed, the chief matter I in-

tended to controvert, and muſt ſtill think, is far leſs probable than that act of the abſorbents, conceived of by Mr. HUNTER; although it ſhould not be perfectly accurate, nor the ſole cauſe of the apparent increaſe of the ulcer.

§ But this idea of ulceration ſuggeſts a very natural inquiry, viz. From whence comes the purulent matter diſcharged by ulcers? It has been ſaid, that ulcers are drains to carry off peccant humours; * or diſſolved cellular and muſcular ſubſtance; † we have been told, indeed, that pus exiſts in the blood, and is

* "Ulcers may be looked upon as drains which nature has made choice of to relieve herſelf." LE DRAN.

† "Pus is a mixture of various ingredients, viz. blood, which has loſt its red colour, and is the largeſt ingredient in the mixture; a little viſcid lymphatic juice, and the extremities of the lacerated veſſels, which fall off in ſmall parcels, and are converted into a ſoftiſh and whitiſh kind of glue." FIZES, *On Suppuration.*

"Si ſanguis in ventrem effuſus fuerit, præter naturam, neceſſe eſt ut ſuppuratur. HIPPOC. *Aph. xx. Lib.* 6.

"Hac enim parte caro putreſcit et exulceratur, et accedentem pituitam et bilem, inſuper putrefacit, et fit pus." Id. *de Morbis. Lib.* 2.——See alſo CULLEN.

poured

poured forth at theſe outlets.—The laſt-mentioned idea is in itſelf ſo improbable, and ſtanding unſupported by any deciſive proofs, it may be regarded merely as hypothetical.—A few remarks on the former will naturally ariſe in the further diſcuſſion of the ſubject.

"The moſt probable opinion," (ſays a very ingenious and reſpectable author)* "hitherto advanced, concerning the formation of pus is, that it is always produced by a certain degree of fermentation in the ſerous part of the blood, after its ſecretion into the cavities of ulcers and abſceſſes." This opinion ſtands ſupported by the moſt reſpectable authorities,† but is not free from difficulties. Serous effuſions made from a ſurface, that is not in a ſtate of inflammation, will remain for months unchanged, and never aſſume the appearance of pus.‡ More or leſs inflammation ‖ ſeems ab-

* Mr. BELL. *On the Theory and Management of Ulcers*, &c.

† Dr. GEORGE FORDYCE.

‡ The water in hydrocephalus internus, aſcites, hydrocele, &c. which is generally coagulable.

‖ "When a quantity of fluid is thrown out into any cavity, (the inflammation continuing) it ferments, and is converted into pus." Dr. GEORGE FORDYCE.

ſolutely

ſolutely neceſſary to its formation. It may likewiſe be obſerved, that the nature of the diſcharge depends greatly upon the healthy, or morbid ſtate of the ſore, as will be made to appear in its place.

Perhaps then, it may approach nearer the truth to ſuppoſe, that pus is a ſecretion ſui generis, from the ruptured veſſels of a cavity, or ulcerated ſurface, conſequent on a certain degree of inflammation; poſſeſſing originally the moſt bland and ſalutary qualities.* Not that

* It is not neceſſary, that a part ſhould have preciſely what we underſtand by a glandular ſtructure, in order to ſecrete fluids for particular purpoſes. The mucous membrane, which lines every cavity expoſed to the action of external air, ſecretes a fluid called mucus, for the defence of that part, &c.—This, in a healthy ſtate, is mild and inodorous, and much reſembles the white of an egg, being perfectly inſipid; and conſequently, can be little more than a mucilage and water. Whereas ſerum contains neutral ſalts in abundance; ſuch mucus therefore cannot be effuſed ſerum. If it were merely ſerum, it would be more irritating as its conſiſtency increaſed, the reverſe of which is the caſe. When morbid ſecretion takes place, as in catarrh, gonorrhœa, &c. the effects of the neutral ſalts in the ſerum poured out, are pretty evident. Now, theſe diſeaſes cannot increaſe the quantity of ſaline matter; conſequently, we muſt ſeek for the cauſe of this acrimony in the different action of the veſſels.—Theſe variouſly excited, by external or internal ſtimuli, to irregularities in their action, may likewiſe aſſiſt us in our inquiries after

that it is meant to be underſtood, that pus is ſecreted in the form under which it appears, but it is probable, that when it covers the ſurface of a wound, under the appearance of an adheſive glairy fluid, the only difference between this and white pus conſiſts in the quantity of ſuperfluous water: when, by remaining for ſome time upon the part, the thinner fluid is abſorbed, or exhaled, the remaining part aſſumes opacity, and acquires a thicker conſiſtence;* for if wounds, furniſhing a great quantity of good pus, are examined a few hours after being dreſſed, no ſuch matter as pus will appear, but a thin, ill-looking ſanies is ſpread over the ſurface.†—Indeed, the

after the cauſe of the various appearances and qualities of pus, and of the difference between that and ſuch morbid ſecretions from an inflamed ſurface, as aſſume a purulent appearance.—With regard to the latter diſtinction, it may be worthy the conſideration of phyſiologiſts, how far the *ſimple inflammation* of a ſurface, may poſſibly be inadequate to the production of true pus; and whether an *eroſion*, or *loſs of ſubſtance*, may not be eſſential to that particular ſecretion.

* Sir John Pringle. (*Appendix.*)

† From hence, a fallacy may be diſcerned in the ingenious theory of the late *Mr. Freke*, though it is a much more rational one than that of concoction, or what is uſually meant by fermentation. He humouroufly obſerves, if it can be ſhewn,

the formation of true pus, and the putrefactive fermentation of animal ſubſtances, bear no reſemblance to each other, ſince pure pus is perfectly inodorous, whilſt the other emits a volatile alkali. Nor do we find, that matter diſcharged from a wound bears any regular proportion either in quantity, or quality, to the ſuppoſed degree of fermentation. If we only attend to the different aſpect of an ulcer, when it produces pus, ichor, or ſanies; whether we reaſon analogically, or from evident appearances; the idea that has been thrown out, of the healthy or morbid action of the veſſels, as the moſt probable cauſe of this difference,† appears, by no means, to be an unreaſonable conjecture. In ſupport of this theory, however, I ſhall mention one fact that may merit ſome attention; viz. that not only

ſhewn, that any part of the blood, put into a ſand heat, and digeſted there; or that decocting it ever ſo long, produces any thing like laudable pus, he will give up his theory, viz. that pus is produced by deſpumation, or agitation, from the ſerum of the blood paſſing through the partially obſtructed extremities of divided, or ruptured veſſels, which like a ſponge, reſiſting a free paſſage to the globules of air contained in the blood, beats up the ſerum in its paſſage into a froth, juſt as ſoap and water would be by a like agitation.—— ART of HEALING.

† See Mr. BELL's laſt edition of his Treatiſe upon *Ulcers*.

by

by medicines, but by mere external applications, it is frequently in the ſurgeon's power to alter both the appearance, and the quantity of matter diſcharged from a ſore, as every man of any experience muſt often have had occaſion to obſerve.

But, the idea of true pus being a diſſolution of the muſcular and cellular ſubſtance, &c. may, in another point of view, ſeem to demand a little further attention. In ſupport of this opinion, we are told, that in every collection of matter, there is actually very conſiderable loſs of ſubſtance in the part, and for proof of it we are pointed to the cavity from whence the matter has flowed, on the burſting, or opening of the abſceſs, and to the diſappearance of the cellular and adipoſe membrane; the greater part of which, however, ſeems only to be condenſed. To examine this point a little more narrowly, let us take a view of it where the fact ought to be the moſt evident, as in the caſe of large impoſthumations, ſuch as the pſoas abſceſs; from whence a pint, or more, of matter has run out on the ſpontaneous giving way, or artificial opening of the integuments. In ſuch caſes, has there been a deſtruction of muſcle, veſſels, cellular and adipoſe membrane, equal to the quantity

of

of pus, or the cavity that is formed? What! a pound * of muſcle and adipoſe membrane deſtroyed? A bulk, equal to a pint, or more, of matter?—We may, indeed, find the muſcles ſeparated one from another, and the cellular membrane torn away by the weight of the fluid; or ſometimes a muſcle divided longitudinally, or its belly eaten through; but the idea of a whole pound of organized parts being loſt, or melted down into matter, is really much more improbable than any thing that has been advanced concerning the formation of pus, or doctrine of the abſorption of parts into the conſtitution. For whatever has been ſaid on the latter, is merely to account for a loſs of parts, which ſometimes actually diſappear in the proceſs of ulceration; but the former opinion ſuppoſes a quantity of parts to be deſtroyed, (in order to account for exceſſive ſuppuration) where there is no ſuch manifeſt diſappearance. Moreover, in large collections of matter, there is not only a prodigious diſcharge on the firſt burſting of the abſceſs, but it often continues immoderate for days, and even for months, till the patient is

* Experiments on living animals have lately been made to ſupport ſuch an opinion.

deſtroyed

deſtroyed by it: yet upon opening the body, only a very ſmall portion of muſcle appears to be loſt, and there is little, or no more deficiency of adipoſe membrane in the part, than throughout the reſt of the body; the whole of which, in ſuch caſes, is exceedingly emaciated, and the fat ſuppoſed to have been abſorbed. To ſum up the whole, it appears, that in the former inſtance of the ſudden ſpreading of an ulcer,* the diſcharge is, by no means, proportionate to the great loſs of parts; and in the preſent, there is not a loſs of parts proportionate to the immoderate diſcharge.

But it is ſaid by others, that there is not, indeed, ſo great a diſſolution of ſolid parts, as to furniſh the whole of theſe purulent matters, but ſo much of them is melted down as gives tenacity to the fluid; and is an eſſential ingredient in true pus.† Beſides what has been already advanced in anſwer to this latter aſſertion, it may be obſerved, that wherever there is an evident admixture of fat, or of the craſſimentum of blood, or the parts are in a lax and

* *Page* 20.

† Boerhaave, Mr. Pott, &c.

ſloughy

ſloughy ſtate, the pus is never good, but always thin, diſcoloured, or fetid. Whereas, when the ſurface of an ulcer is firm and florid, without the leaſt appearance of the melting down of parts, (as it is called) there, it has been obſerved, the pus is thick and good; there only is it *album, læve et æquale.*

Moreover, if the diſſolution of organized parts, does not furniſh a very conſiderable portion of the purulent diſcharge, it can ſupply only a very ſmall part of it, and is rather an accident, in particular inſtances, than a neceſſary ingredient in true pus. This, I think, may be ſufficiently manifeſt from what has been ſaid above on the ſtate of the parts, as they appear in thoſe who die of an atrophy, in conſequence of very large incurable abſceſſes, as well as from the foul ſtate of every ſore, and the impurity of the pus, whenever there is an admixture of fat, or of the craſſimentum of the blood. And if ſo little of the pus can be furniſhed by the diſſolution of ſolid parts, and its true purulent appearance be not occaſioned thereby, the difficulty is not removed, and the queſtion returns, viz. how is pus formed?—a queſtion I have attempted to anſwer, and it is hoped, in a manner, that for any thing that has yet been advanced to the contrary,

contrary, may appear more ſatisfactory and rational than any other account that has been given of the matter.

§ When the conſtitution has, at a certain time of life, been long accuſtomed to the preſence of an ulcer in ſome part of the body, practitioners have been much divided about the propriety of attempting a cure. It has been deemed improper to heal it, without ſubſtituting a drain in ſome convenient part, in its ſtead.* This opinion is founded partly on theory, partly on obſervation. If we regard old ulcers as drains, or outlets for vitiated humours;† the evacuants of a conſiderable quantity of fluids, where retention muſt diſorder, or overload the ſyſtem,

* See Mr. BELL, *On Ulcers*, who thinks iſſues in all caſes indiſpenſible; of which ſentiment further notice will be taken.

† A meſure qu'on travaille à guérir l'ulcere, il faut avoir ſoin d'ouvrir un cautere à la partie qu'on jugera le plus convenable, pour donner aux mauvaiſes humeurs un èpanchoir à la place de celui qu'on va boucher. (*Traitè des Ulceres, &c.*)—The improbability of the idea of humours exiſting in the blood, and diſcharging from ulcers, has been lately ably diſcuſſed by *Dr. Cullen*, *Mr. Bell*, and *Everard Home, Eſq.* in the *Philoſ. Tranſac.* Vol. 81.

and induce plethora, * &c. ſuch ideas muſt naturally produce a doubt of the expediency of effecting ſo important a change: and facts are not wanting to prove that diſagreeable, and even fatal conſequences, have followed the drying up of long continued ulcers, and even of iſſues.†—But though the facts cannot be denied, the explanation given of them may be called in queſtion‡. We know, that in many caſes, very ſuſpicious a priori, ulcers have been dried up, not only without bad conſequences, but where very conſiderable advantages have enſued. Whereas, fatal accidents have ſometimes taken place after the cautious healing of more recent ſores in apparently good habits of body, which would ſcarcely

* Mr. BELL.

† Le DRAN's Obſervations—SHARP's SURGERY, *Introduction.*

‡ Ulcera diuturna et inveterata non ſine periculo curantur, niſi corpus diligentur purgetur, et victus ratio bona obſervetur; cujus rei exemplum habet *Gal. Fabricius*, de quodam viro qui cum ulcus inveteratum in crure ſiniſtro ab empirico ἀμεθοδος curatum fuiſſet, poſt menſes aliquot pleuritide in ſiniſtro latere correptus, atque inde mortuus eſt, et morbo durante *talia* expuit, *qualia* antea ex ulcere effluere ſolebant.

SENNERTUS, *Lib. v. Prognoſtica.*

have

have been attributed to ſuch cures as to their proper cauſe.—The *poſt* Hoc and *propter* Hoc, it is well known, require a judicious diſcrimination.—Where, indeed, there has long been a very profuſe diſcharge of matter, a ceſſation of the accuſtomed evacuation may have ſome influence. But if particular caſes be excepted, it is more than probable, that the effect of ulcers upon the conſtitution, is not to be imputed to the Quantity, much leſs to the Quality of the matter diſcharged by them; which it is likely, depend on the ſtate and action of the veſſels of the part, where, at leaſt, there is no ſpecific contagion. No opinion is more popular than the exiſtence of humours in the blood; and perhaps very few opinions have leſs foundation in fact. The ſerum of blood may differ in conſiſtency, and contain more or leſs ſaline particles; the red globules may exiſt in greater or ſmaller quantity; the coagulating lymph may vary in its relative proportion to the watery parts of the blood—if we advance much further, we are treading merely on hypothetical ground.

Nor are we warranted to conclude from obſervation, that Quantity ought to influence us much more in the healing of ulcers. This

has, indeed, been ſtrongly aſſerted by many, and is urged by Mr. BELL in the laſt edition of his Treatiſe upon Ulcers; but it is apprehended, without any appearance of argument—Let us inquire into the fact—Are the effects of ulcers upon the conſtitution, by any means, proportionate to the quantity of matter diſcharged by them? Nay, do not ulcers more commonly take place in people of a ſpare and thin habit, and thoſe of a lax fibre, rather than in the athletic, and ſuch as are ſubject to plethora? And do we not ſee, that the ſpecies of ulcer, and its ſeat, very often determine its harmleſs, or miſchievous tendency? Whatever may be the habit of body, were we always to form our prognoſtic of the termination of ulcers, from the quantity of ſurface they occupy, or the fluids they diſcharge, every day's experience would prove the fallacy of ſuch an indication. Small ulcers, (unattended with caries of the bone) may bring on hectical ſymptoms, and the amputation of the whole limb ſhall ſave the life, and reſtore the health of the patient.

It has been obſerved by the *Editors* of the *Critical Review*, in their remarks upon this tract, that they have ſeen "both aſthma and palſy repeatedly brought on and cured, by healing

healing an old ulcer and again opening it; nor would any remedy prevent the recurrence of theſe dangerous diſorders, or cure them, without reſtoring the uſual diſcharge; and from the very ſame part."—I feel myſelf indebted to every reader who may ſtate objections in an open and candid manner, eſpecially when they relate to matters of fact, as in the preſent well-choſen inſtance. But, I imagine it cannot be a preſumption to ſuppoſe, that ſuch inſtances are very rare, and can therefore operate only in a way of general caution. As to the more common evils which may have followed the healing up of ſore legs, it has been obſerved, that they cannot all be attributed to the cure of the ulcer, though it is poſſible ſome of them may. But this, it has been ſaid, is an effect, by no means, peculiar to the cure of ſore *legs*; and I am certain, for I ſpeak from experience, is ſeldom owing to the *cure*, but to the *improper manner* in which the healing has been accompliſhed; whereby the veſſels of the part are left under a certain diſtempered ſtate and morbid action, which terminates either in a new ulcer, or irritates the ſyſtem: effects that can very rarely follow a proper digeſtion and due cure of the ſore. And this is a circumſtance of ſuch importance in regard to ſore legs, that if pro-

perly attended to muſt, ſooner or later, induce ſurgeons to adopt the plan, now upon due reflection and experience, again commended to their notice; and will, I hope, eventually prove a laſting benefit to ſociety, when I can no longer have an intereſt in it.—But to return from this little digreſſion: it is *general* doctrines that good practitioners will have regard to, and the ſafety of healing old ulcers on the legs, is mentioned as ſuch; and as a *general* doctrine, I may venture to ſupport it both from reaſon and experience. Nor do objectors, I imagine, deſign to prohibit the cure of them on every occaſion, in the fear of aſthma, palſy, or any other chronic complaint. Particular exceptions there, doubtleſs, are to every general rule, and with which men of practice are very well acquainted, and to which they will cautiouſly attend: though by the bye, ſurgeons are continually attempting the cure of old ulcers on the legs in every large hoſpital, juſt as readily as if no kind of bad conſequence were ever to be apprehended; and when they fail of ſucceſs, are nevertheleſs in no fear of inducing an aſthma, by removing the ſalutary ulcer, at the expence of the limb. As to the peculiar objection to healing *old* ulcers, there is a deal of fallacy in the circumſtance of the length of time an ulcer

ulcer may happen to have ſubſiſted, and particularly with regard to poor people, in whom it often becomes ſtationary merely from their neceſſitous ſituation, which deprives them of the beſt means of relief; to which may be added, their not being in a capacity of complying with the miſtaken notion of the neceſſity of reſt,* which has proved eventually the

* An anonymous writer, who lately ſuggeſted his thoughts on ulcerated legs, with a view to lead ſurgeons to inveſtigate the ſubject, juſtly claims from his candour a title to notice, eſpecially from me, for the polite mention made of the plan I had recommended, which was then but juſt publiſhed. And it is with pleaſure I can aſſure this gentleman, that the treatment of ſore legs is now a matter taken up in different parts of the kingdom, and with a ſucceſs that has ſerved amply to confirm the practice I had ſuggeſted. Every freſh inſtance has demonſtrated the propriety of the idea I threw out, as to the occaſion of the difficulty of the cure, and the means of removing it, as well as of the futility of attempting it upon the lenient plan, which, as this writer obſerves, either fails in the firſt inſtance, or the ſore often breaks out again. In further confirmation of this ſentiment, I would remind this candid inquirer, that much more powerful applications than yellow baſilicon are required to bring ulcers into a good ſtate; which once effected, dreſſing them with a mild digeſtive will not keep them open, (as he has ſuggeſted, in caſes where he apprehends they ought to be preſerved as iſſues,) unleſs it be from its not being ſufficiently active; and not from its ſtimulus. Let the pea be taken out of an iſſue, and the ulcer dreſſed with yellow baſilicon; or a perpetual bliſter be treated in like manner, and they will neither of them be long kept open; whereas, common

the occaſion of more amputations, than almoſt all the injuries from violence and accident, which uſually attend the lower claſſes of mankind.

§ The ill-effects which ulcers have upon the conſtitution depend, it has been ſaid, on the circumſtances and ſituation of the ſore, and ſeem to ariſe from irritation, and the conſequent general ſtate of excitement into which the ſyſtem is thrown. When the diſcharge is very profuſe, inanition is produced; but ſimple inanition is not a proximate cauſe of hectic fever, nor of ſymptoms of irritation.* The ſyſtem being kept in a perpetual ſtate

blifters are ſometimes difficult to be healed; and every practitioner muſt have known them continue open for two or three months, in ſpight of every attempt to the contrary, eſpecially in teething children; though here, it is acknowledged, the evil is not local. This writer's idea may, however, ſerve to exemplify what pains are taken, upon the lenient plan, to compel ulcers of the legs to dry up, when the light ſtimulus of a mild digeſtive is ſuppoſed capable of keeping them open.—We cannot therefore infer, from ſome complaints ſucceeding to cures effected in the ordinary way, that there can be no ſafe way of healing old ulcers; nor learn from ſuch practice, when, or by what means they may be ſalutary, or injurious to the habit.

* Wounds of the tendons, ligaments, cartilages, and the cavities of joints, are more liable to be attended with ſymptoms

ſtate of tenſion by the conſtant ſtimulus of an ulcer, and nature fruitleſsly exhauſting herſelf to ſubdue an obſtinate diſeaſe, will ſufficiently account for that train of ill ſymptoms, which ſometimes accompanies ulceration.*—But though ſtimuli, in certain habits, and under certain circumſtances, may prove detrimental to health, yet in many inſtances, we find them excellent remedies. The good effects of bliſters and cauſtics, applied near the ſeats of diſeaſes, are generally known; yet we do not ſuppoſe, that there is any ſpecific virtue in cantharides, neither do we regard them as the evacuants of vitiated humours. It is a fact pretty generally admitted, that however plentifully a bliſtered part may

toms of irritation, than the inflammation of other parts: by ſuch ſymptoms therefore are meant, great depreſſion of ſtrength, anxiety, frequent reſpiration, quick and ſmall pulſe, a tendency to delirium, or ſpaſmodic affections of the muſcles. Theſe ſymptoms do not indicate a diſeaſe of the general ſyſtem, but depend upon the preſence of an irritating cauſe; and when the cauſe is removed, the effect immediately ceaſes.

* Natura enim, ſemper, ſolicita eſt in conſervatione individui ſui, morbiſque ſeſe opponit; ſed prout valida aut imbecillis fuerit, aut victrix evadit, aut ſuccumbit. HILDANUS, *Obſerv. Chirurg.* 77.

pour

pour out its ſerum, it is often more advantageous to heal the ſore, and apply a freſh ſtimulant, than to keep it open by mild digeſtives. If the good effects of bliſters, therefore, be admitted upon theſe principles, why reject this reaſoning in the caſe of ulcers, which may not improperly be termed perpetual bliſters or iſſues?

The effects of ulcers upon the conſtitution in general, being thus hinted at, the main queſtion may be reſumed, viz. Is it always proper to attempt the cure of ulcers? Were a general and direct anſwer to be offered, it might be given in the affirmative. Should a caſe occur (which is not improbable) where upon the whole, it may be judged a leſs evil to ſuffer the ulcer to remain, than to attempt its cure; yet if its extent of ſurface be very conſiderable, it will be prudent to leſſen its dimenſions. To this may be added, that as the ſeat of an ulcer, however ſmall, may be in a very inconvenient part of the body, a large iſſue* may, in many caſes, be ſubſtituted

* In all theſe caſes, it is proper to purge once or twice a week with calomel, if the patient can bear it, and to make an iſſue when the ſore is almoſt healed. SHARP. *Introduction*, *p.* 40.

in

in its ſtead;† which if this reaſoning be valid, will much oftener than it is imagined, have the ſame good effect. Whether, therefore, we regard the operation of ulcers as a drain, or as a ſtimulus to the ſyſtem, there can ſeldom be any reaſonable objection againſt healing them.

The preceding obſervations are natural, they are founded on facts, and it is hoped, they will ſupport the inference intended to be drawn from them. Many of them almoſt inſenſibly occurred to the author in the courſe of his practice, nor did he diſcern half their force, till repeated experience conſtrained him to attend to them, and forced on his mind ſuch reflections as led to ſupport them. Be it obſerved, however, once for all, that ſucceſs preceded his reaſonings; and though he ſhould have failed in his theory, the facts ſtand unaltered, and every man will find himſelf at liberty to prefer his own illuſtration of them. He concludes it, indeed, far ſafer, even induſtriouſly to invent a ſpecious theory

† Le Dran, Bell. The latter has ſome obſervations tending to prove, that the diſcharge from a common iſſue is uſually much greater than is generally imagined.

in

in ſupport of experience, than to found a practice on mere metaphyſical reaſonings, however ingenious they may ſeem. If he has erred, he has erred on the ſafe ſide, and again cheerfully ſubmits both his principles and practice to the judgment of others.

A TREATISE

A

TREATISE

UPON

ULCERS of the LEGS.

IN the treatment of ulcers on the lower extremities, it has been eſteemed of the utmoſt importance, to conſider the ſore in a peculiar connexion with the general health of the patient. In this view, it has been judged ſufficient to bring ſome ulcers into an eaſy, harmleſs ſtate; whilſt others, from their long continuance, magnitude, or the advanced age of the patient, have been thought incapable of cure. But where none of theſe impediments may occur, ſurgeons, nevertheleſs, differ very much about the moſt ſafe and rational means of accompliſhing it.

Whether

Whether there be many ulcers whoſe cure may not be undertaken with the greateſt ſafety, and probability of ſucceſs, I ſhall not diſpute again in this place;* and however numerous they may be, the known rules of art are ſufficient for every thing that ſeems to be expected from it. I may, however, venture to add, that perhaps nothing will contribute ſo much to the eaſe of the patient, as the bandage hereafter to be mentioned, drawn moderately tight. It is the confeſſedly curable ulcer then, that will be the chief ſubject of this tract, including, however, many of thoſe found in that dubious ſtate ſome practitioners have imagined.

To purſue this intention more perfectly, it will be neceſſary to take a comprehenſive view of the uſual modes of treatment recommended, together with the internal remedies on which ſurgeons have at different periods principally relied. And here a large field for diſputation would open, if notice were taken of every thing that has been in vogue, or has had ſome warm advocates even from the preſs.

* See *Introduction*, pages 33, 43.

But

But I ſhall only glance at ſuch things as have not been generally adopted, and ſhall chiefly confine my obſervations to thoſe in great credit amongſt ſurgeons of reputation; who the author of this little eſſay wiſhes may peruſe it with the ſame degree of candour, that he has meant to exerciſe of modeſty and reſpect, in the liberty he has taken in differing from them in opinion. He cheerfully acknowledges the ſuperiour abilities of many of thoſe who may be his readers, as well as their more extenſive experience in the general practice of ſurgery—he thinks, however, he has ſome improvements to offer on the article of ulcers, though there are ſo many others, in which he ſhould think it ſufficiently honourable to ſay, *I præ, ſequar, ſi non paſſibus æquis.*

It may be proper to begin with the internal remedies, as they will require but few obſervations, and will ſerve to unfold the nature of the plan propoſed in the following pages. Amongſt remedies of this claſs, the CICUTA, SOLANUM, and NITRE were once in great repute with ſome practitioners. Of the former, which has been tried in ſo many complaints, little more need be ſaid in this day, than that it hath failed of that general ſucceſs we were once made to expect, in any of thoſe for which it

it was at firſt ſo highly recommended; though it is well known there are others, in which it frequently proves a moſt valuable remedy. In the hands of judicious phyſicians, and particularly thoſe great ornaments to the profeſſion, the late Drs. WARREN and FOTHERGILL, many ſevere anomalous complaints have been immediately relieved by it, after having withſtood every rational mean that could be thought of.*—The cicuta, however, is no ſpecific for ſore legs, and though it may have its

* Of this, the writer of theſe pages was, perhaps, one of the moſt fortunate inſtances, when under the care of the late Dr. WARREN for a moſt ſevere and painful affection of the face. The cicuta alſo proved equally ſucceſsful in regard to *Mrs. Underwood*, when afflicted for a long time, with violent pain in the ſtomach, and for which Dr. WARREN had previouſly directed cordials, bitters, and opium, without any laſting advantage.—The author has continued theſe remarks on this remedy, (though its virtues are now pretty well aſcertained,) as a ſmall token of Reſpect to the memory of that very eminent Phyſician, to whoſe long Friendſhip and Services he has been under the moſt delicate Obligations; and as, by no means, the leaſt of them, that he was, more than once, the kind inſtrument of prolonging the valuable days of the author's neareſt relative, and choiceſt comfort in life. The cicuta hath likewiſe been ſometimes efficacious in diſeaſes of the moſt dangerous nature, and even in that opprobrium to the healing art, the cancer, when ſeated in the *uterus*. Of this, the writer may give the public a fuller account in ſome future work, if the remedy ſhould continue to be as ſucceſsful as he has in ſeveral inſtances experienced it.

uſe

uſe as an anodyne, in a few caſes hereafter to be mentioned, it will be ſufficient to obſerve here, that it hath, perhaps, done leſs for theſe than for any ulcers, for which it has been at different times recommended.

The SOLANUM, I believe, has been long exploded, as a remedy not at all to be depended upon, and would not have been mentioned here, if great things had not once been ſaid of it. It appears, however, to have had its uſe in ſome caſes, which I was witneſs to many years ago, when houſe-ſurgeon to *St. George's* hoſpital; but it is certainly much too powerful and uncertain a remedy for general uſe, and no rule has been found whereby a judgement might be formed of the probability of its ſucceeding, unleſs it may be ſaid in caſes attended with great pain; and herein it is not only far leſs certain than opium, but much inferiour to the cicuta. It may, however, be adminiſtered with ſafety for a few days, and will often produce a florid ſurface on an ill-conditioned ſore.

NITRE was a few years ago recommended in the cure of ulcers;* and having been long re-

* Dr. ROWLEY, *On Ulcers of the Legs.*

gardful of every thing that promiſed relief in theſe complaints, I was readily diſpoſed to attend to it. After a fair and repeated trial of it, I can venture to ſay only, that it is likely to be uſeful upon the lenient plan, as it certainly co-operates with the intention there purſued, of reſt, evacuations, &c. by its known quality of leſſening ſenſibility in the nerves of the ſtomach and the general ſyſtem, and thus making the fluids circulate more ſlowly: but it has been obſerved,* that the cure of ulcers, when accompliſhed by ſuch means, is ſeldom permanent. Beſides, the poſſibility of ſuch a medicine, in large doſes long continued, producing ſome unpleaſant effects in certain conſtitutions, may be conſidered as another objection to its general uſe. It is, indeed, a well known and powerful diuretic, but when taken in the manner preſcribed, its temporary good effects, I apprehend, are not ſo much to be attributed to this as to its ſedative powers. In more moderate doſes, however, it may be adminiſtered in thoſe caſes, wherein the above remedies are evidently called for, as will be noticed hereafter.

* Vide the Introduction.

Before

BEFORE I proceed to inquire further into the uſe of internal remedies, it may not be amiſs to glance likewiſe at ſome external modes of treatment not generally adopted, which might not, indeed, be thought worth mentioning, but that I wiſh to notice every thing that has been reputedly ſucceſsful.

One of theſe conſiſts of frictions, and though it may be accounted in ſome degree empirical, probably ſome good may have been done by it. And it ſo far coincides with the preſent plan, as it proves a ſtimulus, ſupplying the defect ariſing from the languid circulation in the extremities. It will thereby liberate the parts, and open the fine veſſels terminating on the ſkin;* but there is ſomething ſo painful (as I am told) in the operation, and ſo inelegant and inartificial in the mode, that no ſurgeon will probably ever adopt it.

There are other empirics who effectually cure ulcers of the legs without confinement, or regulation of diet, ſome of them with, and

* Defrictio poteſt ſolvere, ligare, incarnare, minuere; dura ligare: mollis ſolvere: multa minuere: moderata craſſefacere. HIPPOC. *Officin. Med.*

others without the uſe of tight bandage. One of theſe makes free uſe of the mercur. corroſiv. rub. and as it appears, with very good ſucceſs: but where no bandage has been applied, the ulcers are apt to break out again.

Another method among ſuch practitioners, is that of bathing the limb in aſtringent liquors, or applying aſtringent lotions or dreſſings. And indeed ſuch a practice in ſome caſes, with certain limitations and additions, ſeems more intitled to attention, than many other external applications; though it is capable of doing great miſchief in the hands of empirics. This method, however, as far as I have been able to trace it, does nothing without very tight bandage or reſt.

Beſides theſe methods, there are others which have been uſed in different parts of the kingdom, not without ſome ſucceſs; but ſo much pains has been taken to conceal them, that their good effects are neceſſarily very limited. Among theſe, the moſt remarkable that has come to my knowledge, is that long practiſed by a reſpectable gentleman not of the profeſſion; who died ſoon after the former edition of this work appeared. He, indeed, ever kept his remedies as ſecret as poſſible; but,

but, it is to be hoped, his ſucceſſor in this branch of the healing art, may be prevailed upon to act with a liberality becoming the profeſſion.

I proceed now to take notice of ſuch internal remedies as have been in more general uſe, and are ſtill in great reputation with the beſt practitioners in ſurgery.

The firſt I ſhall mention is MERCURY.—This may, indeed, be uſed with great advantage in many caſes,* as a moſt powerful deobſtruent and ſtimulant. But when exhibited freely, ſo as to raiſe a ſalivation,† the caſe is entirely changed; it may, indeed, from the vaſt diſcharge it occaſions by the various ſecretions, in a few inſtances carry off ſomething that has been injurious to the habit, and may eſpecially keep it from the wound, and from counteracting the ſurgeon's deſigns; but it is very probable, it uſually acts far more powerfully by reducing the vis vitæ for the preſent, and thereby coincides with the intentions of reſt, diet, and purgatives, as will be further ſhewn in the ſequel of this work. And every

* See FALCK *on Mercury.* † See SHARP's Surgery.

candid practitioner will allow, that of all the caſes of ſore legs that return ſo frequently to the hoſpitals, the greater number is from thoſe who were cured under a courſe of mercury; nor is it even probable, that ſtrong and laborious men, whoſe ſores have been healed by the means of ſo debilitating a plan, ſhould continue long in a ſound ſtate, when the patients return to their uſual diet and exerciſe.

CALOMEL taken inwardly, and in ſmall doſes as an alterative, though it leſs powerfully promotes the ſecretions, acts nevertheleſs upon the ſame plan, and being, indeed, uſually joined with purgatives, cannot fail to effect juſt as much as other medicines of this claſs. It may have one advantage of them, however, by acting as a ſtimulus to the ſyſtem, and in common with other mercurials is likely to be ſerviceable where the habit may be tainted with lues venerea.

PERUVIAN BARK is directed in the cure of ulcers of the legs, as it is alſo of many other ſores, and is, doubtleſs, a very valuable drug. In the caſes before us, and perhaps in all others, it acts as a tonic, and as ſuch, often produces wonderful effects; neither phyſician nor ſurgeon would willingly practiſe without it:

but

but in the preſent inſtance, it may be objected to, in many caſes, as a medicine to be very long continued, at leaſt, with the view in which it is ſometimes preſcribed. It is uſeful only where nature is languid, and her powers ſtand in need of aſſiſtance to bring an ulcer into a good ſtate; it may then, in general, be ſoon diſcontinued, as ſhould every other mean uſed under the idea of expediting a cure. It may be doubted, indeed, if it ever acts as an aſtringent in this way, but if it does, it will be often injurious, as will be further explained in its place.

After what has been ſaid, little need to be obſerved on the article of PURGING, unleſs it be to make an apology for ſo egregious a deviation from the general, and moſt antient practice;* and this I am ready to do both on the preſent, and every other occaſion, when I ſhall be found differing from gentlemen who have made ſurgery their ſtudy and practice much longer, and to more advantage than I

* See HIPPOC. *Lib. de Humor.* TURNER, SHARP, and HEISTER on Ulcers of the Legs, the laſt of whom, more particularly, adviſes frequent purges to carry off the foul humours; forgetting that a continued recourſe to them, will carry off the good as well as the bad.

have pretended to.—But, *amicus Plato, amicus Socrates, ſed magis amica veritas.*—To yield to any authority, would here be criminal. Facts muſt, and will ſtand.—I have ſeen the practice of the moſt eminent of the profeſſion both here and in *Paris*, and have profited from it; but in this inſtance, at leaſt, general preſcription has failed, and every man knows how tedious is the cure, and how frequent the relapſe of ſore legs. Nature is compelled to dry up the ſurface of the ulcer, by the improper help of epulotics, reſt, abſtinence and phyſic, rather than encouraged to throw off by the ſore, whatever is offenſive, to fill up the ſurface with ſound fleſh, and gradually to abate the diſcharge, only in proportion as that ſurface diminiſhes.—This is the work of nature.—Νουσων φύσις ἰατρος*—art ſhould do no more than aſſiſt her endeavours, or remove the obſtacles in her way.—But this is to anticipate the ſubſtance of the following ſheets; ſuffice it to ſay here, that whatever virtue the exhibition of purges may be judged to have in healing of ulcers, the frequent uſe of them certainly does not diſpoſe them to remain ſo; nay on the other hand, I venture to aſſert, that the long continued uſe of them is needleſs,

* Hippoc. *Epidem. Lib. vi.* § 5.

and

and even prejudicial, in the cure itſelf, as is every other mean of lowering the ſtrength, and for the preſent impairing the general health of the patient.

Another mean in great repute, both with former and modern practitioners, is the uſe of ALTERATIVE MEDICINES.—What virtue ſome drugs may poſſibly be poſſeſſed of, it may not ſeem very modeſt to diſpute, but this I may venture to ſay, that ſome medicines have obtained very fine names, which it is well if they deſerve. That there are ſuch, as with very little or no ſenſible operation, may aſſiſt the vis medicatrix naturæ to make a ſalutary change in the ſyſtem, will not be doubted by men of experience: though there are certainly very few medicines that act ſpecifically on any diſeaſe, or induce any ſuch change in the blood, as the term ſeems deſigned to imply. There are caſes and conſtitutions, it is granted, that require medicines to aſſiſt the healing of wounds, but in ſpecific contagions excepted, we have little reaſon to think, there are any deſerving the name of alteratives, in ſuch a ſenſe, as to point them out as adapted to the ulcers now under conſideration, or that do any thing more towards the cure of them, than of any other wound. It will be ſufficient,

there-

therefore, that the general health be attended to, and ſuch medicines occaſionally directed, as are likely to promote it, (of which notice will preſently be taken); if it be otherwiſe, I have been hitherto fortunate in not having found the neceſſity of them, and the patient ſeldom cares how few he is troubled with.

The reader's attention is drawn next to the DIET to which ſuch patients ought to be confined; and here I muſt again expreſs my diſſent from the general opinion, which I would not do, without being thoroughly ſatisfied of the ſufficiency of the grounds upon which I advance ſo very an uncommon one. But it is apprehended to be a matter of very conſiderable importance.—The diet ought not to be ſlender, unuſually low, or limited, as is too frequently recommended,* but juſt that which the perſon ought to uſe in a good ſtate of health; lower than too many like to indulge in, and rather better than ſome people allow themſelves; paying due attention to cuſtom and habit, which, it is well known, are to a proverb become a ſecond nature. The

* Modicus cibus et aqua omnibus ulceribus conducunt. HIPPOC. *De Ulceribus.* See alſo HEISTER, TURNER, and more modern writers on this ſubject.

ſafety

ſafety and advantage of ſuch a diet will be particularized in another place, at preſent I ſhall confine myſelf to what is judged to be improper, and ſhall therefore briefly point out the diſadvantages of an error in this reſpect. A low and very limited diet, by its effects in weakening the conſtitution, together with reſt and purging, tends to keep up that indiſpoſition to heal, conſtantly obſerved in theſe ſores; and thus conſpires with the weaker circulation in the parts, to prevent the formation of good and laudable pus, ſo neceſſary to the cleanſing and filling up of every old ulcer. Beſides, cures effected under ſuch a regimen are very unlikely to ſtand, and accordingly very rarely continue for any length of time. In many patients, and eſpecially the heedleſs, and often abandoned amongſt the poor, who ſoon return to their old and very different ſtyle of living, the yet tender cicatrice is unable to withſtand this new impetus of the fluids, the conſequence of which muſt be plain and obvious, without adverting to other conſiderations. Indeed, too applicable to this and other circumſtances of diſcipline, in the management of ſore legs, is that univerſal maxim, *omnis ſubita immutatio periculoſa*; for indeed nature is abhorrent from

from it.*—In ſhort, if the cure of very bad ulcers on the lower extremities is deſigned to be laſting, there muſt be a greater conformity in the non-naturals, as they are called, both under, and after the cure, than ſeems to have been agreeable to the ſentiment, or practice of the generality of ſurgeons in any age.

The ſuppoſed importance and neceſſity of REST, and an horizontal poſition of the affected limb, has long been a *ſine qua non* in the cure of large and old ulcers on the legs, both amongſt the ancients and moderns;† and

* Neque ex multa fame nimia ſatietas; neque ex nimia ſatietate fames idonea eſt.—Item, neque ex nimio labore ſubitum otium, neque ex nimio otio ſubitus labor, ſine gravi noxa eſt.

CELSUS, *Lib. i. cap.* 3.

† Stare autem ulceri minime conducit, præſertim ſi quis in crure ulcus habeat; imo neque ſedere, neque ambulare. Verum otium et quies maxime conferunt. HIPPOC. *De Ulceribus.*

See alſo *Traitè des Tumeurs et des Ulceres, Paris*, 1759.

" I injoin reſt, with a due poſition of the limb, if not in bed or upon a couch, lying along at leaſt upon ſome chair or ſtool, near a level with the trunk of the body." TURNER.

" Above

and though it may ſeem bold, yet it is the leading deſign of this publication to attempt to ſet it aſide, at leaſt, to propoſe a method of cure without it, better, more rational, and laſting. And here it will, doubtleſs, be ſuppoſed, that every idea of neceſſity, or peculiar indication is excluded, ſuch as fever, local inflammation, &c. which certainly demand a temporary confinement; and that the objection is limited to the ſimple idea of reſt of the part, in order to facilitate, or perfect the cure. Whereas, the frequency, I had almoſt ſaid conſtancy, with which large and old ulcers on the legs are found to return, is greatly owing to their having been healed in an horizontal poſition of the limb.

HAVING now conſidered many, and perhaps the chief of the internal means in general uſe, together with the poſition of the affected part, and the diet of the patient, I ſhall proceed to make ſome obſervations on the

" Above all things reſt, and an horizontal poſition, which laſt circumſtance is of ſo great importance to the cure of ulcers on the legs, that unleſs the patient will conform to it ſtrictly, the ſkill of the ſurgeon will often avail nothing." SHARP's Surgery. *(Introduction)* p. 38.

ordinary

ordinary topical applications, the more immediate province of ſurgery.

And the firſt thing that demands a particular notice, is the long continued uſe of *Fomentations* and *Poultices*, which, however they may invigorate and warm at the inſtant, tend greatly to relax the open mouths of the fine veſſels, to deſtroy the tone of the muſcular fibres, and induce a flabbineſs of the ſkin over the whole limb;* thus laying an additional foundation for ulcers, healed in this way, to break out again. The uſe of them likewiſe generally obliges the patient not only to reſt, but to keep in his bed,† that the limb may be preſerved conſtantly warm; for where this is not attended to, little good can reaſonably be expected, ſince a common poultice, ſoon becoming cold, is likely, in many caſes, to produce more harm than advantage. What has been ſaid, it ſhould be obſerved, relates to their long continued uſe; an occaſional recourſe to them, eſpecially in the commencement of the cure, and in ſome inſtances hereafter to be ſpecified, may be ſometimes, though not very frequently neceſſary.

* See BELL. *Part ii.* §. 2. † *Id.*

With-

Without examining particularly the great variety of *Dreſſings* that have been in common uſe, it will be ſufficient in this place to ſay, that mere greaſy applications without ſome warm and ſtimulating addition, however proper and uſeful in ſimple ulcers on other parts of the body, are liable to the ſame objections, and therefore not adapted to old ſores on the legs. For though, like the former, they may ſometimes, with the aſſiſtance of reſt and epulotics, bring the ſkin over the ſurface, they are ſure to leave the diſeaſe at the bottom.

AFTER having thus ſtated ſome principal objections againſt the ordinary practice, I am happy that experience warrants me in propoſing a plan of cure more certain and agreeable, as well as more durable than any hitherto deſcribed. Indeed, the ſucceſs has been abundantly greater than was at firſt expected, and its ſimplicity cannot fail of recommending it in preference to any other, if it were poſſeſſed of only equal advantages. But to ſave the trouble and pain of confinement and ſtrict regimen; almoſt without the uſe of internal remedies, which in general are not very much reliſhed by patients of any claſs, is ſurely

ſurely an object highly worthy of attention; ſo that very little need be added, if the rationality and ſafety of the method can be made equally clear with its certainty and eaſe.

In the treatment of ulcers, two things are principally aimed at, by whatever means we may deſign their accompliſhment, firſt, to bring the ſore into a good condition with reſpect to its appearance, its diſcharge, and the ſenſations of the patient; and then ſecondly, to induce its ſurface to dry up, or form a cicatrice. In order to theſe, in the cure of every deep ulcer, it is neceſſary that its bottom ſhould throw up healthy granulations, and come up near, or quite to the level of the ſurrounding ſkin, unleſs the ulcer has been attended with great loſs of ſubſtance, or caries of the bone: but ſuch incarnation is here included in the firſt idea, as it uſually takes place at the time, or very ſoon after the ſore puts on a healthy appearance. To theſe intentions a third may be added, which enters peculiarly into this plan; which is to heal them by ſuch means as ſhall be moſt likely to prevent a return of the complaint.

An ulcer is here ſuppoſed to be unattended with much topical inflammation, or uncommon

mon pain, and without any febrile diatheſis in the habit. Here the principal intention is to procure, and keep up a copious diſcharge, without any apprehenſion, in general, about the time it may continue, or the effects it may produce; the former will not ſubſiſt long after the ulcer is become clean, the latter, (it will be ſhewn) may be regarded as the very object in purſuit; at leaſt, the ſame means that have produced and kept up a copious diſcharge, will cleanſe the foul ſurface, liberate the veſſels in the part, and occaſion a good appearance of the ſore, much ſooner than any thing elſe, and can therefore produce no manner of bad conſequence.*

* "I ſhould be unjuſt if I did not remark, that when theſe terrible ſcorbutic ulcers are cured by this method, (a ſuppurative poultice) you may perceive during the cure, the patients countenances, which were generally of a ſqualid hue before, to be clearing up daily by the diſcharge from the ſore, till they come to a perfectly healthy appearance. And this being done without any internal medicines, I lay it down for a maxim in all caſes, that it is better for the patient to diſcharge any peccant matter externally from the part, which nature laid it on, than to retract it into the blood, by bleeding, purges, or other evacuations; for by this means, the matter is often tranſlated to the lungs, or other noble part: for it is a well known maxim, that *ab extra intus redire, malum eſt.*" FREKE's *Art of Healing*.—Though ſome of this reaſoning may not be correct, the fact is, nevertheleſs, in point.

THE means of accompliſhing theſe intentions may be ranked under four general heads, External Applications, Bandage, Exerciſe, Diet and Medicines. Of the firſt it would be difficult to make any exact, or regular arrangement; but it may be ſaid in general, that they conſiſt of digeſtives, deterſives, eſcharotics, and a certain kind of aſtringents.

In order to ſtate the advantages which it has been ſaid may be expected from this plan, it will be neceſſary to examine the ſeveral articles juſt now enumerated, and to obviate the objections that may ariſe in the minds even of eminent practitioners, againſt ſo free a uſe of the remedies propoſed; eſpecially as ſo much is expected from them, as to occaſion the diſcarding ſo many other means which cuſtom has ſtamped with an almoſt ſacred authority.

The Digeſtive in moſt caſes cannot be too ſtrong, if not productive of that kind of irritation, which may provoke inflammation in the neighbouring parts; nor is that much to be apprehended, for it is remarkable, that very irritating applications to theſe ulcers ſcarce ever induce it, eſpecially, (however incredible

ble it may appear) where exerciſe is freely allowed; which by its tendency to promote the diſcharge, ſo far counteracts inflammation.

The preciſe form of ſuch digeſtives, it would be thought trifling to inſiſt upon, as the Pharmacopœiæ of *London* and *Edinburgh* for the moſt part contain them, or ſuch as are very ſimilar to them;* though both pharmacopœiæ are deficient in regard to a ſuitable digeſtive for tendinous parts. In other reſpects, however, ſome one of the more active among theſe preſcribed formulæ, will in a very few days produce a fine ſurface on an old, and very painful ſore, and with the aſſiſtance of exerciſe, a good diet, and proper roller, will in a variety of caſes, and without any other means, effect a ſpeedy and laſt-

* It may be uſeful, however, juſt to ſay, that the Unguent. Baſil. nigr. of the *London* Pharmacop. as a digeſtive for ulcers on the legs, is as much preferable to the Baſil. flav. as that would be to the Ung. album. And I mention this, and have alſo in the preſent edition, taken notice of other applications I have found uſeful, in conſequence of being informed, that gentlemen who have adopted the plan, and with very good ſucceſs, have been at great pains in making experiments in regard to topicals, before they could be ſatisfied what might beſt correſpond with the hints I had formerly given.

ing cure; though the patient ſhould have been ſubject to ſore legs for a number of years, and never eaſy a month together, after having been repeatedly healed in the ordinary way.

I can foreſee no formal objection to be made againſt any of theſe digeſtive, or deterſive ointments. Such made of the warmer gums, balſams and oils, have always been in uſe among ſurgeons; and if I have intimated, as I mean to do, that they cannot be too powerful (if calculated to promote digeſtion, and induce firm and florid granulations); and that they ought to be longer continued than is commonly done; it is on account of the more inert ſtate, and weaker circulation obſerved in theſe parts, and their diſpoſition to break out again into a ſore, if precipitately healed. It is to prevent this, that the diſcharge is directed to be kept up as long as nature ſhall be diſpoſed to it, inſtead of having early recourſe to drying, or healing applications, as they are called, in order to haſten the cure; and for which, in the greater number of caſes, there will be found little occaſion on this plan.

But

But to paſs on to things more liable to objection, ſuch as very ſtimulating, and corroſive applications. Here, I wiſh firſt of all to obviate in part the force of a principal objection, that they occaſion pain, (which, however, they often remove,)* by obſerving, that ſuch applications are to be uſed only now and then; and I can aſſert, that although they are to be applied in conſiderable quantity, they will not excite half ſo much pain as might be apprehended; as they are uſed chiefly to ſores in a certain ſtate, which will very well endure them, and are rendered very tolerable at the worſt, by means of that exerciſe ſo continually inculcated. For I have been conſtantly told by patients to whom they have been the moſt freely uſed, that walking always mitigates the pain, which accordingly is ſevereſt in bed, at whatever time of the day they have been applied. Nor ought I to omit aſſerting, that filling a ſore with mercur. corroſ. ruber affords very little more pain, than moderately ſprinkling it on the part; beſides which, we are to conſider, that one dreſſing in this manner fre-

* See WISEMAN, *On Ulcers with Pain. Chap. iv. Obſerv. 2. Book ii.*

quently ſuperſedes the neceſſity of many repetitions of it, in a more moderate way.

Another objection may ariſe from the ſtimulus ſuch applications will occaſion, endangering inflammation, and rendering an ill-conditioned ſore ſtill more obſtinate, by producing a ſharp and ichorous diſcharge more abundantly corroſive. This is certainly true in a few caſes, of which I ſhall ſpeak in their proper place, but in a general way, facts prove directly the contrary; ſores on the legs require a ſtimulus,* and it has been ſaid, are not eaſily provoked to inflammation. I have applied the red precipitate to ſores exquiſitely tender and painful, diſcharging nothing but a thin ichor, which has covered the ſurrounding ſkin with heated pimples, and ſmall ulcers, and this after trying lenient applications to no purpoſe; the precipitate has immediately changed the appearance and diſcharge of the ſores, the ſurrounding ſkin has loſt its unpleaſant aſpect, the pain has been removed, and

* WISEMAN obſerves, that "applications to theſe ulcers ought to have a temperate heat; and whatever objections" (ſays he) "may be made againſt even cauſtic applications, where milder ones take no place, we proceed to the ſtronger."

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the ulcer, when ſmall, been nearly filled up in a few days.

Beſides objections taken from the pain, and other effects of ſuch evident ſtimuli, it may be further remarked againſt the quantity and manner, in which ſuch applications are uſed, as well as the intention itſelf, that large ſurfaces, being thus repeatedly and rudely deſtroyed, and even deep ſloughs produced in ſome of them, is a very inelegant mode of dreſſing an ulcer, and has more appearance of the farrier, than the ſurgeon. I ſhall not on this occaſion ſtay to compare it with the actual cautery, very frequently in the hands of the former, and not altogether laid aſide by the latter; but reſting ſatisfied with the evident advantages ariſing from the means recommended, muſt urge the neceſſity of maintaining, in many caſes, a new ſurface; without which, though the ulcer may ſometimes heal up, under ſtrict regimen and reſt, it will moſt probably break out again when the patient returns to his uſual diet and exerciſe.

Beſide the arguments that have been offered in defence of ſuch applications as create a more than ordinary irritation, or ſeem diſpoſed to increaſe pain in the ulcer, there are

not wanting obvious facts to ſupport them; it being univerſally acknowledged there are many caſes, even where a kind of ſpurious inflammation* attends, in which they prove more ſpeedily uſeful than any other applications. I might particularly inſtance the ſmall ulcers on the gums, and inſide of the lips, ſaid to ariſe from an affection of the ſtomach, which are generally cured in a few days, by a little burnt alum, a ſlight touch with the argent. nitratum, or a drop of ſpirit of ſea-ſalt. Whereas, holding warm milk, or any other lenitive, for a much longer time in the mouth, and frequently repeated, though ſoft and pleaſant to their tender ſurface, offended even with the ſtroke of the tongue, would have little or no tendency to heal them. So alſo the true ſcurvy on theſe parts, will bear, by degrees, the un-

* I have made uſe of this term from a conviction, that there are frequent appearances of inflammation, as to colour and heat, where the action of the parts affected is very diſſimilar to that always met with in true inflammation. Of this ſpurious kind may be ranked Eryſipelas, the treatment of which, it is well known, ought to be materially different from that of the true phlegmon—But the ſubject is not proper for further diſcuſſion in this place, and would lead me too far; though it may be neceſſary the reader ſhould keep the diſtinction in view, in regard to various paſſages, as well as the practice frequently inculcated, in the following pages.

diluted

diluted ſpirit of ſalt,* and is cured by it, when bland applications would increaſe the complaint. It is alſo well known, that ſome ſmall ulcers upon other parts of the body, (and even affections of the eye-lids) which are apt to furniſh an almoſt cauſtic diſcharge, and are therefore intolerably painful, and difficult of cure under lenient applications, are frequently dried up in a very ſhort time, by a few ſlight touches of the lunar cauſtic; which by deſtroying ſome little inflamed gland, removes the ſource of the evil at once.

In regard to the bracing, or aſtringent applications I have mentioned, the propriety of them will appear beſt in their proper place. It will only be neceſſary at preſent to remark, that theſe aſtringents are different from thoſe in common uſe, both becauſe they do not leave a dryneſs on the ſkin, and becauſe they are of a very deterſive nature; neither are they made of ſuch a ſtrength as materially to ſuppreſs the diſcharge, but rather to brace the ſurface of ſome particular ulcers: beſides, the uſe of them is not conſtant, and is ſeldom long continued.

* See VAN SWIETEN's *Comment. on* BOERHAAVE, and LIND, *On the Scurvy*.

I COME next to the ſubject of BANDAGE.—It may be an empirical, but is no bad argument, when the integrity and common ſenſe of the ſpeaker are not ſuſpected, to ſay, that facts are ſtronger than reaſoning; they are ſtubborn things even to a proverb, and they ſpeak in favour of very tight bandage. I have applied it to the corpulent, heavy and inactive, to the young of an inflammatory habit, to the aged, to the pale and leucophlegmatic, nor have ever repented the uſe of it when accompanied with exerciſe; which every one will ſee, has ſome tendency to counteract the poſſible ill effects of ſuch applications to the extremities. It is true, we have known tight rolling and the laced-ſtocking prove hurtful to ſome people, when applied to large, hard ſwellings of the leg with varicoſe veins, and have been repeatedly followed by ſuch complaints of the ſtomach, as have made it neceſſary to lay them aſide, though the limb has been greatly benefited by their uſe. But this diſadvantage does not always take place even in theſe caſes, and the objection is greatly, if not totally removed, as I have had the cleareſt proofs, when there is a ſore on the leg; the diſcharge from which, cannot but tend to obviate

obviate all the apprehended ill-conſequences:* and whilſt that is, on this plan, encouraged by digeſtives and exerciſe, it will abate only in

* See WISEMAN's Surgery, *Book ii. Chap. 4. Obſerv.* 1.

Although for very obvious reaſons, † I have been unwilling to adduce any caſes of my own, in ſupport of my opinion, yet I am inclined to think the following is ſo fully in point, in regard to the difference made by the preſence of a ſore, where tight bandage is uſed in diſeaſed and diſordered limbs; as well as reſpecting the ſafety of healing up ſome ulcers in very ſuſpicious habits of body; that I have been prevailed upon, in this inſtance, to wave my prejudices againſt introducing caſes on diſputable points. To avoid breaking in upon the ſubject, however, I have thrown it into a note, which the reader may paſs over if he pleaſes.—A young woman, whoſe mother had been afflicted with a painful tumour and hardneſs of the leg, a ſchirrhus in the breaſt, and afterwards died of a cancer in her mouth; had herſelf a ſimilar complaint of the leg from the age of eight years. On the firſt appearance of the menſes, this became more painful and enlarged, and ſoon after, confined her for ſome time to her bed; it was then fomented and poulticed, and ſhe was let blood and purged, which took off the inflammation, but the hardneſs and tumour remained as before. A linen roller, and afterwards a laced-ſtocking were applied, which kept it eaſy for three or four weeks, but her ſtomach being affected, ſhe was obliged to lay them aſide. In a ſhort time, the leg became painful again, but did not inflame for ſome

† Aut famam ſequere, aut ſibi convenientia finge,
Scriptor— HORACE, *de Arte Poetica.*

years;

in proportion as the ulcer diminiſhes in ſize; which, as will be ſhewn preſently, is permitted, rather than compelled to dry up.

Beſides

years; when ſhe was again confined, and treated as before, but never got rid of the hardneſs and ſwelling, nor was ever long together perfectly free from the pain.—She was always eaſier after the flow of the menſes, and in moſt pain about the return of that period.

At the age of two and twenty ſhe married, and ſoon becoming pregnant, her ſtomach was much indiſpoſed, and ſhe ſuffered in that way for ſeveral weeks. During this time, her leg became abundantly better, the hardneſs and tumour abated, and ſhe could bear to preſs, and beat it with her hand, in a way ſhe had never before dared to attempt. About the end of the fourth month of geſtation, her ſtomach complaints conſiderably abated, and her leg became inſtantly painful; and in two days was very hard and enlarged, was conſiderably inflamed, and had a little oozing from under the ſkin. At this time I was conſulted, and was informed that her ſituation in life would not allow her to reſt, or keep the leg long together in an horizontal poſition.

Upon conſidering the whole of her caſe, it appeared very prudent to prevent complete ulceration, but (as ſhe could not keep the part ſupported) I was fearful I could not prevent it; though had her habit of body been different, I ſhould have had no fears about treating the ſore like other inflamed ulcers on the leg, whenever the ſkin ſhould completely give way. I therefore did what I could to prevent the further cracking of the ſkin; but without abſolute reſt, this was ſcarcely to be expected, nor is it certain, even that could

Beſides theſe things, the kind of roller is to be conſidered, which ought to be made of the thinneſt *Welch* flannel, not thicker than coarſe

could have prevented it. It accordingly gradually became ſore and was painful to the higheſt degree, ſo that ſhe often ſat ſcreaming out aloud for hours together, unable to put her foot to the ground, though the ſore was dreſſed only with ceratum alb. or a ſaturnine cerate, and ſometimes with different kinds of poultices; and ſhe kept the limb as quiet as her ſituation would allow of.

Not knowing what to do better, I determined to try my own method, being ſatisfied that tumid legs will often bear rolling when affected with ulcers, though they would never endure it before. I dreſſed it with a powerful digeſtive, and rolled it up moderately tight, though it was ſwelled to a greater ſize than any leg I ever ſaw; notwithſtanding it had, for ſome time, been reſted great part of the day on a chair. It had broken into a ſmall, foul ſore, of an irregular ſhape, without the leaſt appearance of red fleſh, and the ſkin was diſcoloured half round the leg, which was exceedingly varicoſe; it diſcharged a ſcalding ichor, that deſtroyed the ſkin wherever it ran, increaſing the ſize of the ſore, and was getting daily more painful.

Having dreſſed it as above-mentioned, ſhe was now permitted and encouraged to walk, and became eaſier from the hour the roller was applied, which continued to agree perfectly well. The leg remained pretty eaſy throughout the cure, except for ſome time after it was dreſſed, when ſharper applications had been uſed, but continued to ſpread till the ulcer became clean, and a copious diſcharge was produced; which

coarſe linen, with advantages no linen can have; it not only being ſofter, ſitting eaſier, and making no plaits on the ſkin, but is elaſtic

which did not exceed ſeven or eight days at the moſt. After this, it was no longer painful, diſcharged laudable pus, and in about a fortnight's time, began to heal very kindly, and continued to do ſo till it was perfectly well.

Like many other ulcers, when the patient is permitted to walk, it was always moſt painful in the night, for which reaſon, ſhe was obliged to take occaſionally half a grain, or a grain of extractum thebaicum at going to reſt; which was ſufficient to quiet the pain, and ſeemed to produce a very good effect on the ſore. At the time this was the moſt painful, ſhe was not only permitted, but compelled to walk out, and always came home eaſier, though ſhe often walked further than ſhe had been able to do at a time for a number of years; yet the leg never ſwelled, but evidently grew ſofter by the exerciſe. In this caſe, as well as in a variety of others I may afterwards ſpecify, the application of precipitate, though it ſometimes gave great pain for an hour or two, proved an occaſion of ſpeedier eaſe on the whole, as it deſtroyed the foul ſurface, produced a laudable diſcharge, and brought the ſore into a deſirable ſtate much ſooner than it could otherwiſe have been. When this application was firſt made uſe of, the ulcer diſcharged a cauſtic ſanies, that corroded wherever it ran, and the ſurface was ſo ſenſible, that the patient could not endure the ſlighteſt touch of an armed probe, to wipe off the matter. It was only a few weeks in getting well, the hardneſs and tumour of the limb ſubſiding as ſoon as a copious ſuppuration took place; and before the ulcer was healed, the leg was, I believe, quite as ſmall as the other, and has continued ſo ever ſince, though there

elaſtic to a very conſiderable degree. This is greatly increaſed by its being torn acroſs, and ſewed together ſelvagewiſe, (the hard ſelvage-thread being firſt cut off) whereby the roller is made to yield to every motion, and varying ſhape of the limb, and admits of, and aſſiſts the patient ſo much in walking, that I have known perſons with ſuch painful ſores as prevented their ſtanding upright, find immediate relief in this reſpect, and be able to walk with comfort, from the firſt hour they were put on. To this fact numbers can teſtify, and it is from experience I can ſay, it will be found no ſmall improvement in rollers for the legs, that flannel is ſubſtituted for linen, and that they are made up in the man-

there was no remarkable return of the ſickneſs, and ſhe has now lain-in above a twelve-month. Neither did geſtation afford any impediment to the cure, nor have I in all the caſes I have met with, ever taken notice of ſuch an effect, though ſome gentlemen of character have, and much has been obſerved by authors on this head.—"*Impregnantibus ulcerum curatio difficilis, propter retentionem ſuperfluitatum earum, propterea quod ipſarum menſtrua retinentur.*"

AVICENNA, *de Ulceribus. Lib. iv.*

This perſon has ſince the firſt edition of this tract lain-in a ſecond time, and has enjoyed good health, the leg alſo continuing perfectly well.

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ner here recommended. I ſhould neither ſpeak with ſuch confidence, nor enlarge as I have done about trifles; having ſeen enough to prevent my depending on a few fortunate caſes, or venturing to publiſh my thoughts to the world, as containing any improvement, if not ſufficiently ſupported by facts, or if there were any room left to doubt, upon what ſuch favourable events had turned.—Perhaps theſe, and other advantages * of this bandage, may be explained on the following principles.

I. The moving ſoft parts are not only kept warm, but receive a conſiderable and conſtant ſupport, and their action is rendered more general and regular: we may even ſuppoſe that ſome part of the effects of action, is transferred upon the bandage, or its operation ſo modulated, that it is not wholly exerted on the ſkin.

II. The blood and lymph are determined to a more equable circulation.

III. The growth of fungus is conſiderably reſtrained, and callous edges are prevented, or removed.

* See page 91. *Note.*

IV. The

IV. The ſurrounding ſkin is brought forward on the ſore, and the ſeveral parts are brought into contact; and conſequently, a lodgment of matter is leſs likely to take place.

V. Compreſſion warms, ſuſtains, ſtrengthens; and by repelling from the adjacent tumid parts, derives from the ſyſtem greater powers of healing, to the ſeat of the ulcer.

VI. The compreſſion diſpoſes the ſore to heal more ſmoothly; and theſe advantages which are very conſiderable, are increaſed, as hinted before, by the free uſe of the limb.

I have ſaid ſo much on this head, becauſe this, as a general practice, is ſo much out of faſhion, though once in great eſteem with eminent ſurgeons, and particularly WISEMAN; whoſe contrivance the laced-ſtocking ſeems to have been. The ancients, indeed, made uſe of rollers much oftener than we do, and apparently to conſiderable advantage, but they ſpeak of them only as retentive bandages, or for bringing divided parts into contact, and to aſſiſt the more ſpeedy cloſing up of deep ulcers after a proper digeſtion; or at the moſt,

as expulſive, to prevent fluxion to a part; but their bandages were but ill-calculated to anſwer the end, and were never applied ſo tight as WISEMAN recommended, nor with particular reference to the legs. WISEMAN himſelf, however, does not appear to have underſtood all the advantages he derived from the uſe of his laced-ſtocking, as he ſeems apprehenſive that the cure of ulcers on the legs obtained by this means, are leſs likely to ſtand, than thoſe effected without it. He appears, therefore, frequently to have recommended the ſtocking and rollers on the ſame principle with reſt, and an horizontal poſition of the limb, to prevent what is termed a deſcent of humours to the ſore, and the œdematous ſwelling that often accompanies theſe ulcers. But his reaſoning was certainly not ſo good as his practice, and had his bandage effected nothing beyond his intentions, his ſucceſs would have been much leſs than it was. The roller has many other uſes beſides counteracting the diſpoſition to œdema, (to which the lower extremities are peculiarly liable), and one that I muſt beg leave to notice in this place, ariſing from the manner in which the filling up of every deep ulcer is effected. To this end, there is not only a trifling elongation of the capillary veſſels in the wound, but

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the parts contiguous to the ulcer are found to waſte, or diminiſh conſiderably; inſomuch that *Meſſrs. Fabre* and *Louis*,* eminent ſurgeons in *Paris*, attribute the whole of this proceſs to what they call *un affaiſement*, or a waſting away of the extremities of theſe capillary veſſels. This, indeed, is by no means the whole of the caſe,† though it is principally hereby, that the cicatrice in deep ulcers approaches the level of the ſurrounding parts, when ſuch wounds are perfectly healed; and this, (as hath been mentioned already) ought to be the caſe in newly healed ulcers; and when it is not, the cure in general is not very likely to ſtand.

As this is a circumſtance evident to every attentive practitioner, I cannot help obſerving, it is matter of ſome ſurprize, that rollers are not more frequently uſed than they are, and a greater compreſſion made by them, not only for ſores on the leg, but alſo on many

* *Memoires de l'Academie de Chirurgie, Vol. iv.*

† That there is a power of extenſion or developement in the veſſels of a wounded part, is evident from the vaſt fungus that will ſhoot up in ſome ill-conditioned ſores, and in various excreſcences, which are furniſhed both with blood-veſſels and nerves.

other parts of the body; as it is probable they would not a little contribute to their cure.

There is only one inſtance, however, that I know of (common inciſed wounds excepted) in which this practice has been much attended to, which is that of the venereal buboe; though even in this, the practice has not been general. But the late Mr. BROMFEILD, I know, conſtantly had recourſe to it for that ill-conditioned ſore, which it is well known is frequently very troubleſome to heal, after the venereal virus has been deſtroyed. Such, however, after reſiſting a variety of dreſſings and alterative medicines, have been preſently healed upon the application of a very tight bandage; for which information, when I firſt began buſineſs, as well as many acts of kindneſs, I have been indebted to that gentleman; to whoſe memory the public well knows its obligations in matters of greater importance.

Upon this head, I am alſo obligated to the ingenious author of a Treatiſe upon Ulcers before-mentioned,* whoſe reaſoning long ago perfectly ſatisfied me, as to the ſafety and advantages of tight bandage, and determined

* BELL, *Part ii.* § 2. See alſo CLARE, *On Abſceſſes.*

me

me boldly to puſh the experiment, till I ſhould find reaſon to change my opinion; which this publication is proof enough I have not. But the laced-ſtocking ſo much recommended by WISEMAN, falls far ſhort of this double intention, and is every wiſe inferiour to the flannel roller, which lies much ſmoother, tighter, and makes a much more even, pleaſant, and ſteady compreſſion, than can be made by any other contrivance.* By this means, as it has been ſaid, the growing fleſh in a healing wound, is eaſily kept within bounds, and that troubleſome luxuriance is prevented, of which a more moderate degree

* WISEMAN, indeed, almoſt every where prefers the laced-ſtocking to the roller, giving for a reaſon that the roller makes a leſs uniform preſſure, and even bruiſes the parts: but however this may be with a linen bandage, no laced-ſtocking can be ſo ſmooth, firm, or ſo pleaſant as a flannel roller. The great advantages of which are now ſo evident to me, that however neceſſary ſurgeons may think reſt to be in ſome very bad caſes, however attached to particular diet or dreſſings, or prejudiced againſt any part of this work; I would, entirely upon principle, importune them to add to all theſe, the conſtant uſe of a flannel roller, and can aſſure them of far greater ſucceſs than they have ever had, in every ulcer of the lower extremities. Its advantages, however, are not confined to ſuch caſes, for I may venture to aſſert from further experience of its utility, that a flannel roller is greatly preferable to a linen one, in almoſt every caſe where a roller is had recourſe to, and particularly after amputations, eſpecially in the improved method, as Mr. ALLANSON's may now juſtly be ſtyled.

is always required; and for the want of which, it will be ſhewn, ſores on the lower extremities do not heal ſo readily as on moſt other parts of the body.

As ſo much is expected from rolling, it will readily be preſumed, ſome care is required in doing it, and, indeed, the application of bandage is no contemptible branch of the profeſſion; for though I do not mean to hint, that ſo much judgment or memory is requiſite for rolling up a leg, as in the application of bandage to many other parts, yet great attention is neceſſary. The roller muſt make a due preſſure on every part, or ſome ſinus may unexpectedly be formed; but of this there is not the leaſt danger, if it be applied with care, and the proper directions obſerved, though it be drawn ever ſo tight; neither will it leave ſo much riſing on the ſkin as a linen one, which alſo will give conſiderable pain if the patient be permitted to walk. The warmth likewiſe which the flannel communicates to the limb, eſpecially in cold weather, has long appeared to me a matter of very conſiderable advantage.*

* See BELL, *On Ulcers. Part ii.* §. 2.—In very hot weather, as well as in particular caſes, a calico roller may be ſubſtituted.

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The manner of applying it, it has been ſaid, requires nothing but care. Every one knows that tight bandage ſhould begin at ſome diſtance below, and be carried ſome way above the parts it is chiefly deſigned to compreſs; otherwiſe, the matter attempting to iſſue from the ulcer, being confined by the tight preſſure upon it, will force a paſſage wherever it finds a leſs reſiſtance, and thus convert a ſimple ulcer into a fiſtulous ſore.

But for ulcers on the legs, eſpecially where exerciſe is allowed, this rule ſhould be conſiderably extended, and the bandage (which ought to be about four inches wide) ſhould begin as far below, and be carried as much above the affected part as the limb will allow of. To this end, it ſhould commence at the extremity of the foot, where it ſhould be drawn very tight, (the end of the roller firſt croſſing the inſtep) and after being brought two or three times over the ancle, ſhould aſcend ſpirally (the edge of one turn of the roller being not more than about an inch from another) till it riſes to the calf of the leg. Here the ſtricture ought to be leſs, to permit a free action of the muſcles, and the turns therefore be ſomewhat more diſtant; in

which manner it muſt be continued up to the knee: above this part it would be improper to carry it, though recommended by conſiderable authority,* and that for moſt obvious reaſons, where exerciſe is both permitted and injoined.

I have been thus particular on this head, from the great conſequence I know it to be of, and hope it will not on this account be imagined that I affect any particular art in the performance. Every ſurgeon well knows of how much conſequence it is, that rollers be properly adapted to the end for which they are deſigned, and how much trouble may ariſe from great compreſſion being made above or below the preciſe part, for which ſuch compreſſion was employed: all ſuch are capable of doing it well, if they will do it with care, which is the thing I mean to inculcate; as otherwiſe, the patient whoſe leg is rolled tight, will ſuffer great pain, and the ſurgeon be long diſappointed in the cure. However trifling theſe directions may appear, experience will prove them to be otherwiſe—A very moderate ſhare of knowledge of the firſt prin-

* Mr. ELSE, *Medical Obſerv. and Inq. Vol. iv.*

ciples

ciples of ſcience, were ſufficient to guard me from inſiſting on trifles; upon which the art of healing will never depend. But as there are many young men always in *London*, who come profeſſedly to learn, and ſome of them with very little previous education in ſurgery, for ſuch at leaſt, more particular directions may not be wholly unneceſſary.

WITH regard to EXERCISE, it may poſſibly be ſaid, that this in a great variety of caſes, (even without the preſence of fever, or topical inflammation) cannot fail to produce, or increaſe pain, eſpecially where ſtimulating applications are uſed. And that in all caſes, (though no pain or inflammation ſhould follow) it muſt have a natural tendency to retard the cure, if not entirely to hinder it, both by diſturbing the tender granulations as they riſe on the ſore, and preventing that proceſs of nature by which they dry on the ſurface, and produce a cicatrice.

Of this ſome notice has been taken already, as far as pain is concerned, and it has been ſaid, that exerciſe frequently removes it. In other reſpects, though ſuch reaſoning may be very juſt, as it regards many wounds on other parts

parts of the body, it has not a like application to old ſores on the legs; where a more than ordinary ſtimulus is required. The latter are never ſo expeditiouſly cured, as thoſe on ſuperior parts, in whatever way they are treated; but I am ſatisfied from a variety of facts, will in many inſtances heal ſooner with exerciſe than without it. It is acknowledged, that after the operation for the hare-lip, and every other ſimilar caſe, where parts are to be united by the firſt intention, they muſt not only be brought into contact, but be kept ſo for ſome time, in as quiet a ſtate as is poſſible, or they will ſeldom unite firmly. But how very different theſe caſes are, it can be ſcarcely neceſſary to point out, and I have mentioned them only for the better clearing our way to the preciſe point on which the argument turns. For though the lips of ſuch wounds will not grow together, whilſt they are kept conſtantly in motion, yet both lips will be covered with ſkin in a very few days, and in this ſenſe, a healing of the wound is produced; and it muſt be very great motion, indeed, to prevent it. Now this is the kind of healing in queſtion relative to ulcers on the legs; and if motion of the part affected is capable of preventing it, (where a proper bandage is conſtantly worn)

worn) * it muſt either be ſuch, and to a degree that would prevent, not the union, but the healing of the raw edges of the lip I have mentioned; and ſurely no common action of the lips will do this. Or ſecondly, it muſt be effected from the exerciſe ſo greatly increaſing the diſcharge, as to prevent that diſpoſition to dry up, which ought to take place in the extreme veſſels of the ſore, whereby it

* It may not be uſeleſs in this place, to make a few general obſervations on muſcular action, with a view to point out the ſource of ſome of thoſe particular advantages of tight bandage before noticed,† where exerciſe is uſed. In muſcular action, there is always an accurtation of the moving fibre, and a general enlargement of the muſcle. This increaſe of bulk is not equal, but is greater about the belly, than at the extremities of the muſcle.—Diſeaſe in a part may render this action liable to great irregularities—Faſcia, and annular ligaments, &c. prevent unequal contraction, and its manifeſt inconveniencies.—It is true, we don't find the muſcles acting in ſuch a way, as to preſs from within outwards, to a degree capable of forcing up the ſkin very conſiderably; but they can, nevertheleſs, pull upwards and downwards, with ſufficient force to derange a healing wound.—Now bandage effectually prevents irregular action, and will keep the ſkin from moving conſiderably when the muſcles act, as well as diminiſh the ſwell of thoſe that lie immediately under it.—Theſe are preciſely the points aimed at; and that bandage will anſwer theſe intentions, is very evident, both from reaſon and experience.

† See pages 80, 81.

has

has been ſaid, the cicatrice is formed. And if the quantity of diſcharge be the objection, in regard to ulcers on the legs, it proves all I contend for; it is deſirable if it be good, and the want of it is, during the greateſt part of the cure, the grand obſtacle in our way to the healing of the ſore.* For thoſe on the leg, and eſpecially the moſt painful ones, either diſcharge very little, or abound only in a thin and excoriating ichor. Nor can either of them be changed for the better, but by ſuch means as ſhall reſtore the due tone of the veſſels of the part, ſo as to condenſe the looſe, or unfold the callous texture of the ſurface, and thereby open a way for the ſecretion of laudable pus, frequently the beſt dreſſing that can be applied to a ſore.

Now, exerciſe contributes to this, inaſmuch as it tends to promote a free and bold circulation of the blood, to open the ſmall veſſels, and reſtore a free paſſage in the ſyſtem of lymphatics, whereby it increaſes the ſtrength and vigour of the limb. On this account, the

* L'ulcere ſec, qui ne ſuppure pas, ne peut pas ſe deterger, or tout ulcere qui ne deterge pas, ne peut pas ſe guèrir.

Traitè des tumeurs et des Ulceres. Paris.

diſcharge

diſcharge can never do harm, nor the exerciſe that promotes it keep the ſore improperly open; for if the habit in general have nothing particularly amiſs in it, and the circumſtances of the part be ſuch as have been deſcribed, the diſcharge will gradually abate as the ulcer diminiſhes, and its ſurface will always dry up in a reaſonable time. Such exerciſe of the part is not, indeed, neceſſary to the healing of ſores on the upper extremities; but the difference in the lower ones, and particularly the inferiour parts of them, is greater than has been generally imagined, or has, at leaſt, had any influence upon practice. Nature, therefore, ever attentive to the good of the whole, and provident for every defect, has wiſely ſupplied the natural deficiency ariſing from their diſtance from the heart, in the beſt way it was poſſible; beſides, therefore, that ſhare of labour they have in common with other parts, it has not only impoſed upon theſe (as was hinted before) the weight of the whole body, but has deſtined them to be the inſtruments of its conveyance from one place to another.

But on this ſomething has already been ſaid, and I may have ſtill further occaſion to inſiſt as I go on; ſuffice it to hint here, how greatly pre-

prejudicial it muſt be to general health for any perſon, accuſtomed to labour and exerciſe, to be confined for a length of time in an inactive ſtate, and the greater part of it, in an almoſt horizontal poſition.—Can it then be neceſſary in the cure of ulcers on the legs, to deprive the part affected of thoſe very advantages which nature deſigned for its preſervation in vigour?* Has it the moſt remote tendency to perfect the cure; I mean, to make ſuch a cure as ſhall ſtand?—If not, certainly our art is materially defective, or we are faulty in the uſe of it; for is not a perfect cure much more likely to be effected, under ſuch exerciſe of the limb as ſhall afford the natural ſtimulus, if certain evils attendant upon that exerciſe can be obviated?

It is granted, however, that exerciſe may in the caſe of ſome large ſores, to a certain de-

* Uſus corroborat, otium autem colliquet. HIPPOC. *Med. Officin.*

This obſervation is univerſally allowed, and is remarkably evident in the vaſt influence that great exerciſe of the extremities is obſerved to have in watermen and porters; the former of whom have uſually large ſtrong arms, and ſlender legs, and the latter thick muſcular legs, almoſt without exception, if they are in health.

gree,

gree, retard the healing of ulcerated legs, for the ſame reaſon that very great motion might be hurtful to ſores on other parts. But inſtead of being otherwiſe injurious (by occaſioning fluxion of noxious humours, and I know not what other evils ſaid to be peculiar to the lower extremities), it is really uſeful in every other reſpect if a proper bandage be applied, and is therefore advantageous, upon the whole, for every ulcer on the legs, as I hope hath been tolerably proved; and particularly, as it hath a direct tendency to prevent the ſore breaking out again.*

Many, however, would be the diſadvantages of motion in ulcers of the legs, if they were covered only with a common poultice, or left merely to the dreſſings that are uſually applied

* How far the continuance of a roller, which I underſtand a very reſpectable hoſpital ſurgeon adviſes to his patients, may prevent a return of the complaint, I have no right to attempt to decide, ſince I have never injoined reſt, in any inſtance, ſince I knew how to effect the cure without it; though, indeed, an hoſpital is not the propereſt place to determine the point, as the patients are often never heard of after their diſcharge: we know, however, how very common it is, for large, or old ulcers, healed by means of reſt of the part, to break into much worſe ſores than before they were firſt healed.

to them; but upon the plan here recommended, they are conſtantly ſupported by a firm, ſoft, and yet elaſtic bandage or roller, which in very many caſes, as infallibly counteracts every poſſible inconvenience ariſing from motion, as the motion itſelf, thus ſupported, has a manifeſt advantage. And though ſome objections in turn might, with equal propriety, be made againſt the remedy itſelf, or the conſtant application of ſo tight a compreſſion as has been recommended, yet all ſuch objections, it has been remarked, are greatly obviated by the uſe of exerciſe.*—I am aware, that ſuch argument appears to manifeſt diſadvantage, and may be thought to be little more than a *cir-*

* A free uſe of the limb has been ſo generally exploded amongſt regular practitioners, that it has been more neceſſary to inſiſt thus largely upon it; and this appears, not only from its general diſuſe, but alſo from ſuſpicions ariſing in the minds of ſenſible writers,† after men of ſuch experience and reputation as *Mr. Elſe* ſeem to have approved of it.‡

† BELL, *On Ulcers.*—The following ſpecimen will ſhew how ſtrict an adherence to reſt, authors have required, "Il faut faire tenir la partie malade dans le plus grand repos; le moindre mouvement eſt capable d'y faire des teraillemens, qui augmentent la douleur et la ſuppuration, detruiſent les chairs tendres qui renaiſent, et briſent les premiers linéamens de la cicatrice." *Traitè des Tumeurs et des Ulceres.*

‡ *Medical Obſerv. and Inquiries, Vol. iv.*

culus

culus in circulo; however, it is conſonant to various maxims that were never diſputed: for inſtance, as a very nouriſhing diet would prove hurtful, where proportionable exerciſe were neglected, and vice verſâ, hard labour without adequate nouriſhment, but taken together, contribute to the health of the ſubject; ſo clearly has experience proved to me, the ſalutary effects of tight bandage and exerciſe united, in regard to the ulcers in queſtion.

Notwithſtanding what has been here and elſewhere advanced on this ſubject, I have been ſomewhat ſurpriſed, ſince the firſt appearance of this tract, to find that ſo attentive and judicious a practitioner as Mr. BELL, ſhould in the laſt edition of his treatiſe upon ulcers, ſo ſtrongly inculcate the neceſſity both of lenient applications and reſt, in the cure of ulcers on the lower extremities; without offering one argument in ſupport of the latter, or attempting an anſwer to thoſe I had advanced. Having barely mentioned my opinions, he obſerves, (p. 203) that he has tried every method that has been publiſhed to the world, and has ſucceeded in all of them; but that he finds no cures ſo eaſily or ſpeedily obtained, nor any that prove ſo *permanent*, as

thoſe effected by mild dreſſings and reſt. Now, ſuch ſentiments, eſpecially the latter, appear to me very extraordinary indeed; but being only aſſertions, I may, with the ſtricteſt regard to truth, venture in return to aſſert, that beſides all that has been adduced as evidence, in a way of reaſon and argument; my own experience, and that of numbers of others, in hundreds of inſtances, *runs directly the contrary way*. And I venture further to ſuggeſt, that if Mr. BELL will be at the pains of dreſſing his patients with his own hands, will roll up the legs conſtantly himſelf, and by the due uſe of active applications procure a ſound ſurface to ulcers, he will meet with many that will be healed ſooner, numbers more certainly, and *all* more *permanently*, than by mild dreſſings and abſolute reſt. But if ſurgeons will make uſe only or chiefly of bland applications, which it is granted may ſometimes more ſpeedily induce *new* granulations, as Mr. BELL has aſſerted, but will never induce *ſound* ones in diſtempered parts, or on a foul ſurface; they muſt expect ſuch a cicatrice, however induced, in a ſhort time to give way. And I may juſt obſerve in this place, that I do not wonder Mr. BELL ſo ſtrongly inſiſts upon the neceſſity of inſerting an iſſue previous to the

the cure of every ulcer of long ſtanding,* though he conſiders them merely as local affections.—As iſſues are not likely, however, to do any harm, and are ſometimes uſeful, it were needleſs to urge many arguments againſt ſo general a ſentiment; nevertheleſs, iſſues being always troubleſome, and to many people very diſagreeable, it is but juſtice to ſay, that I rarely propoſe them.

THE DIET recommended in this method, may be as exceptionable to ſome people as any thing that has been advanced; but ſuch are deſired ever to keep in view the whole of the plan, one part agreeing with, and aſſiſting the other, and all of them conſpiring to the grand end in view, which is to heal ſore legs in ſuch a way as ſhall tend to perfect a cure. And, indeed, were it not for the depending ſituation of theſe ſores, ſurgeons would ſcarcely have thought of the propriety of a ſparing, or low diet,† for ſo many months together, in the cure of them; nor yet of that frequent recourſe to purging, without which

* Page 230.

† See BELL, *Part ii.* § 2. where the ingenious author declares himſelf of this opinion.

the healing up of old, or large ulcers is never attempted. For theſe ſores, it has been ſaid, are not uſually attended with inflammation, and where they are, it is ſeldom difficult to be removed. Indeed ulcers of this claſs, are more generally to be met with, in weak, relaxed conſtitutions, than amongſt ſtrong plethoric ſubjects of an inflammatory habit, and are in ſuch circumſtances more difficult to be cured.

But when a way is diſcovered to prevent the ill-effects of exerciſe, and the deſcent of humours, as it is called, there can be no objection, (an evident ſtate of general, or local inflammation excepted), to any diet that would be found proper for ſuch people at another time; and which moſt are ſure to indulge themſelves in, as ſoon as the ſurgeon has taken his leave.

The above ill-effects, it has been already obſerved, are obviated by a proper bandage, and I hope it has been made appear,* that the ſeat of this ulcer being on a depending part, is not the chief hindrance to a cure, but its

* See Introduction, p. 10—18.

being

being an extreme part of the body, in which the circulation is leſs vigourous, and the vires medicatrices naturæ, for theſe reaſons, more languid and ineffectual.

If theſe things are allowed, many advantages muſt ariſe from ſuch a diet* as hath a direct tendency to ſupport the patient in full health, and to aſſiſt the powers of nature to create, and ſupport a diſcharge of laudable pus, the conſtant forerunner of a cure in every curable ulcer.

THE laſt article mentioned relates to MEDICINES, of which ſome notice has been taken already, but chiefly in a way of objection to ſome in general uſe; it will therefore be proper here to enlarge a little on the ſubject, wherein I hope not to forget the caution its importance requires. I know how eaſy, and how common a thing it is with ſome writers, in order to ſupport an opinion, to bear down their opponents on every occaſion, by declaring facts to be on their own ſide; which they often do not, and ſometimes, indeed, are not permitted, to produce. Such an argument,

* Perhaps ſalted meats, and ſpirits, are the chief things to be interdicted.

therefore, ſeldom comes with proper teſtimonials but from hoſpital practitioners, or muſt, at leaſt, expect to ſtand or fall, according to the ſhare of credit due to the writer. As far as that can go, however, in the preſent inſtance, I am encouraged to ſay, experience has led me to ſuſpect, that leſs is to be hoped for, and much leſs is required from medicines, than is generally ſuppoſed; ulcers on the legs being, in general, mere local complaints, not connected with any particular diſeaſe of the ſyſtem. It is poſſible, I may be ſomewhat ſingular in theſe opinions; whilſt others have produced their experience to prove, that ſore legs can only ſafely be cured by internal remedies. It is, however, by no means, my intention to aſſert, that medicines are never neceſſary for theſe, as well as other ſores; but that they are frequently preſcribed in a very indeterminate manner, and their effects are conſequently uncertain. But ſhould the patient labour under the true ſcurvy, or the ulcer follow the ſuppreſſion of ſome periodical, or critical diſcharge, or the diſappearance of a long continued eruption on the ſkin; theſe, beſide other more common complaints, ſuch as evident ſymptoms of a venereal infection, the preſence of fever, &c. will conſtantly call for

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the phyſician's aſſiſtance, who will be at no loſs to purſue a rational intention. In ſhort, whatever is obviouſly wrong in the habit is to be corrected; but where there is no peculiar indication, I neither know how to preſcribe, nor to expect much benefit from medicines. If ſurgeons will reflect for a moment, they will perceive the import of this obſervation; let them conſider only what are the medicines uſually directed, which, perhaps, excepting only the bark and cathartics, are adminiſtered under the idea of alteratives, by which ſome people intend a claſs of medicines that will effect a certain change in the habit, without ſo much as an idea, what that change is to be. The patient has a ſore; it looks ill, that is, it is not deterged, or will not continue ſo; the matter diſcharged from it is bad; or the ulcer is not diſpoſed to heal up.—Let every thing be done in ſuch a caſe, that has a tendency to mend the appearance of the ſore upon rational principles, and which generally is done for ſores on other parts of the body. Let recourſe be had to ſuitable dreſſings; let the patient enjoy the air, moderate exerciſe,* and a proper diet; let a tight bandage be applied to brace and contract the ſore, to keep down

* CELSUS. *Lib. vii. Chap.* 3.

the fungus, remove callous edges, and prove a tonic to the part. If theſe things fail, ſuch medicines ſhould be adminiſtered as will brace the ſyſtem, or correct its manifeſt defects—further than this, I muſt ſay again, I have neither known their uſe, nor that frequent want of them which others complain of.*

Not that troubling patients with uſeleſs medicines, and the little unneceſſary expence, of importance, indeed, to ſome people, are the principal objections on this head; but the

* By a modern *French* writer on this ſubject, we are adviſed, before the healing up of old ulcers, to correct the vitiated blood, and to purify it from the foreign leven with which it is infected. To this end he gives us ſix general indications.

" 1. Si le malade a la verole, le ſcorbut, ou les écrouelles.
" 2. Si le ſang eſt chargé de bile. 3. Si le ſang eſt âcre et
" ſalé ſans être chargé de bile. 4. Si le ſang péche par être
" trop épais, et trop reſineux, 5. Si l'on juge que le ſang
" ſoit trop ſéreux. 6. En générale, il faut, dans tous les
" cas, purger ſouvent le malade, mais le purger doucement;
" lui donner tous les jours une ou deux priſes de quinquina;
" et lui faire obſerver un regime exact, tant pour la quantité,
" que pour la qualité de la nouriture."—If the reader can acquire any practical knowledge from the moſt of theſe indications, I muſt confeſs he has greatly the advantage of me.

great

great miſchief is, that in moſt caſes, the ſurgeon's thoughts being hereby led off to a wrong object, he is diverted from an attention to the true means of affording relief. Inſtead, therefore, of making the moſt of the particular habit of each individual, by proper topical applications and general remedies, he is contriving how he may remove ſome imaginary, or at the moſt, ſome unknown complaint, or to cure a manifeſt dyſcracy, for which he is not likely to find an adequate remedy. But ſhould the time come, when ſome real alterative, or peculiar tonic ſhall be diſcovered that may co-operate with the ſurgeon's deſigns, I ſhall be as ready as others to embrace it.

Wherever ulcers are connected with evident diſeaſe of the ſyſtem, it has been granted, the aſſiſtance of ſuitable medicines will be required; all that I mean to inſiſt upon is, that this is not generally the caſe. The true ſcorbutic ulcer, attended with ſpongy gums, and other marks of putreſcency of the fluids, does not very often occur in this iſland, or at leaſt in the neighbourbood of the metropolis; and the ſcrophulous very ſeldom attacks the legs in form of ulcers. The venereal, indeed, more frequently occurs, or at leaſt, ulcers will partake

take of the poiſon, and I have ſeen alſo the cancerous, or ſomething very like it; but as there will ever be, in theſe caſes, ſomething characteriſtic to their cauſe, the ſurgeon can ſeldom or never miſtake them.

There are, indeed, many foul ulcers, which when of very long ſtanding, are frequently aſſiſted by medicine; but ſuch generally attack the poor, who have either injured their conſtitution by hard drinking, or on the contrary, have been in want of almoſt the neceſſaries of life. In ſuch caſes, the bark as a tonic, (which is ſometimes improved by the addition of ſal martis) is of wonderful efficacy, and ought in many caſes, to be given in much larger doſes than it uſually is; and in a few inſtances, for a conſiderable time.

There is another medicine, which from its popularity, ſeems to claim an attention, and perhaps has been of ſervice in ſome caſes, though I am not yet ſatisfied the ſores would not have got well without it. This is the corroſive ſublimate, which in very large, and old ſores, has, in compliance with cuſtom, been frequently adminiſtered, and with ſeeming ſucceſs. But it is often improper for labouring men, who are much out of doors, and

for

for obvious reaſons more eſpecially in winter. However, where theſe objections do not equally take place, every ſurgeon of experience will judge for himſelf, what advantages he may reaſonably expect from the uſe of it.

Beſides the cicuta, opium, and other internal remedies already hinted at, I ſhall here mention other three—a ſtrong decoction of the woods, lime-water, and emetics. The firſt will be of ſervice chiefly in caſes of obſtructed perſpiration, and cutaneous eruptions, or the ſudden diſappearance of them; the lime-water, in the eriſipelatous ſore, (hereafter to be noticed) eſpecially where a great part of the limb is infeſted with a ſcalding diſcharge, which takes off the ſkin wherever it runs. But we ſhould be diſappointed, if we depend on this, or any other internal means; at leaſt I have always found external applications much more effectual—Emetics, may ſometimes be uſeful in cacochymic habits, or where there is a cold phleghm on the ſtomach; and previous to the exhibition of tonics.

HAVING now attempted, at leaſt, to anſwer ſome principal objections to the plan I have propoſed, and explained what may be expected from it, with the manner in which the effect

effect is produced, it is high time to proceed to a more particular application of it.

In order to this, it will be neceſſary to make ſome Diſtinctions of ulcers, ſince the general indications cannot be alike applicable to all.* Perhaps this might have appeared, with much more propriety, in a former part of the work, but it ſeemed of importance to be fully underſtood as I went on, and to obviate, as they occurred, the difficulties of an attempt to introduce ſo conſiderable an innovation in practice. On this account, I have preferred this deſultory mode to a more conciſe and formal method; but ſhould I ſo far ſucceed, as to point out a practice which others can with ſafety adopt, and furniſh the ingenious with hints that may be depended upon, it is hoped, that ſome, or even many defects in other things will be overlooked.

The numerous claſſes of ulcers, of which writers have treated in ſo many diſtinct chapters, ſeem more calculated to diſplay the ingenuity of authors, than to lead to any uſeful diſcrimination; and muſt therefore tend to perplex thoſe whom they ought to inſtruct.

* See Introd. p. 5—8.

Such

Such diſtinctions are taken chiefly from certain accidental appearances of the ſore, and the nature of the diſcharge; but are moſt of them ſo made as to have very little relation to practice, when applied to ulcers on the legs. Whether, indeed, ulcers are indolent or painful, fungous or callous, moiſt or dry, or diſcharge ichor, or ſanies, amounts to little more than that their ſurface is in an ill-conditioned ſtate, and can make only an accidental, and no eſſential difference in the grand indications of cure: all ſuch circumſtances being mere ſymptoms, requiring only a temporary attention, and not characteriſtic of a difference in ſpecies.

The moſt eaſy and practical diviſion I have been able to make, will be to conſider them under two heads only, which are calculated to illuſtrate the preceding obſervations, and correſpond with the more eſſential points of difference in the treatment they will require.

The firſt Claſs will include ulcers attended with great enlargement, or hardneſs of the limb; recent ulcers originating from an abſceſs, or any internal complaint; and every very old ulcer of a moderate ſize, eſpecially in habits accuſtomed to them.

The

THE Second comprehends the true phagedenic ulcer; ſuperficial ulcers where the ſurrounding ſkin is excoriated by an exceſſive and acrid diſcharge; various large ones in very old people, or thoſe of a relaxed fibre and habit, and all *very* large ulcers with a pale and looſe ſurface, generally the conſequence of bad health, poverty, or neglect.

In ſpeaking of each of theſe, it will be neceſſary to make ſuch enlargements and ſubdiviſions, as may relate to practical uſe.

And firſt, it will be proper to obſerve, there are two general affections, or ſymptoms, every ulcer is liable to, which will require their particular treatment. Theſe are inflammation and pain; for each of which it will be neceſſary to to lay down ſome general rules.

WITH reſpect to inflammation, ſhould this attend a large ſore, where the pain is very conſiderable, (for the pain ſo common in very ſmall ulcers, is ſeldom the conſequence of much inflammation, but rather of a thin and cauſtic diſcharge;) an emollient fomentation of white poppy heads, and afterwards a bread and milk poultice for a few days, may be applied

plied to advantage: but if ſuch a caſe can ariſe as to require a much longer continuance of a poultice, it ſhould be changed for one of the ſaturnine kind. This will furniſh the ſame moiſture and heat, and is not only a leſs relaxing application, (for ſuch it has been obſerved, ſhould never be very long continued to the legs*) but is a more powerful antiphlogiſtic. And here I may venture to repeat from a long experience, that ſuch poultices and fomentations, however great their reputation, are ſeldom neceſſary but in the beginning of the cure, where the parts are in a ſtate of inflammation, and particularly in the poor, who have long endured, and ſtood much upon them in that ſtate; whoſe ſkin is likewiſe often dry and left dirty, and its pores conſequently obſtructed. But as ſoon as the inflammation and foulneſs on the ſkin are taken off, ſtrong digeſtives, with exerciſe and a roller, will produce a much ſpeedier and better digeſtion.†—This I am ſo ſatisfied of,

* See alſo BELL, *On Ulcers*.

† WISEMAN gives a caſe very much in point, and obſerves, that after confining a patient to the bed for a very bad ulcer, which he had poulticed a conſiderable time, he could not get it to heal till he left off the poultice, and applied a laced ſtocking. *Book ii. chap.* 9.

that

that I have no kind of heſitation in ſpeaking peremptorily on the ſubject.

I wiſh to make one remark more on this head, which is, that when a bread and milk poultice is required, it ſhould generally be applied on the naked ſore,* whereby it fits eaſier, and is much more uſeful, becoming the mildeſt application that was ever contrived, if it be well made.† And I hope I ſhall

* See FREKE's *Art of Healing*.

† When I conſider the importance of a good poultice to ulcers, where the uſe of them is called for, and the number of pupils who viſit the metropolis every year, with an expreſs deſign of acquiring every kind of chirurgical knowledge, many of whom there is reaſon to think, have rarely ſeen a bread and milk poultice properly made; it is hoped, it will not be thought trifling on this occaſion to mention the beſt method of making it. This can be at the worſt, but a little time thrown away, and if only one young practitioner ſhould make a better poultice by this means, or if a ſingle patient be benefited by it, I ſhall readily forgive others who may ſmile at the receipt; for however well ſurgeons know how to make them, the fact is, they are ſeldom well made.—It has been too generally thought, that theſe poultices cannot be boiled too long; but on the contrary, it is long boiling that ſpoils them. They ſhould be made of the crumb of moderately ſtale bread, which ſhould be cleared from every thing the leaſt hard, or lumpy, and after being grated, ſhould be rubbed between the hands, till reduced, as near as poſſible, to its firſt ſtate of flour. The milk ſhould then be boiled, and

the

ſhall be pardoned if I add, it ought generally to be made, and applied by the ſurgeon himſelf, or at leaſt in his preſence, and not intruſted to a careleſs ſervant, or ignorant nurſe, as it uſually is; the former of whom imagines no ſkill is required, and the latter, that no body can make one ſo well as herſelf; though there is not one poultice in fifty, made and applied by either of them, that is properly managed. Before I quit this ſubject, I cannot help adding, that if much benefit is ex-

the bread lightly ſprinkled in with one hand, whilſt it is kept ſtirring with the other. The difficulty with which the ſpoon is moved, will ſhew when a proper quantity of bread is put in, after which it ſhould not remain on the fire above two or three minutes at moſt, and ſhould be turned out boiling, by which means the bottom will retain its heat a long time, after its ſurface is become cool enough to allow of its application. It ſhould be ſpread upon a piece of double linen cloth, (not over fine) by the help of a round-ended knife (greaſed with hog's lard or oil, inſtead of putting greaſe into it, which prevents its hanging together,) to the ſize it is required: and ſhould generally be about three quarters of an inch in thickneſs on the linen. If poultices are too ſtiff or lumpy, they will lie heavy, and become painful to an inflamed part; if too thin, or not well mixed into an homogeneous maſs, they ſoon become cold, and chill the part they are intended to nouriſh.—If a poultice is to be applied to a depending part, ſuch as the eye or the breaſt, where it will be apt to ſlip off, it will be an advantage to turn up the four ſides of the inner cloth, about half an inch over the poultice; which will thereby be greatly ſupported.

pected from theſe applications, they ſhould in many caſes be renewed oftener than they generally are: for the want of this, the ſmaller ones eſpecially, ſoon becoming cold, I am ſatisfied, are often likely to occaſion more injury than good.

Theſe, it is well known, are the caſes which call for bleeding and purging, and for which I have likewiſe ſometimes adviſed nitre and cicuta,* or opium; the laſt, however, will be leſs proper if the inflammation be conſiderable; but the antiphlogiſtic regimen can never be required very long, for if the inflammation does not preſently yield, there is probably ſome other cauſe for it than the ulcer, unleſs there be diſeaſe of the bone. The former, it will be the phyſician's province to diſcover and remove; but if neither of theſe ſhould be the caſe, and yet the inflammation continue, it will not prove of the phlegmonous kind, and I can venture to ſay will yield together with the pain, to ſuch topical applications as ſhall promote a diſcharge, and

* This may ſometimes have one advantage of opium, as it hath no tendency to conſtipate the bowels, and if it has any other virtues than that of an anodyne, as ſome people have been of opinion, the patient will enjoy the advantage of them.

with

with the aſſiſtance of firm bandage and exerciſe, ſhall cleanſe or deſtroy the too ſenſible ſurface; which will immediately be followed by eaſe and a healthy appearance of the ſore.

It may be neceſſary in this place, to take notice of a ſource of pain not mentioned, that I know of, by any writer, and for a clear account of which I am obliged principally to an ingenious correſpondent in the country, ſince the firſt edition of this tract; having myſelf obſerved it only once, in any conſiderable degree. This is an obſcure œdema, more commonly attending ſmall ſores, and occaſioning very great pain about the little ulcers, or not unfrequently along the whole ſpine of the tibia, eſpecially in the morning; and is effectually cured by only applying the bandage a little tighter than uſual. It may be met with not only in large and tumid limbs, but in very well ſhaped legs, where the œdema is not perceptible to the eye, but may always be diſcovered by a careful examination with the finger.—As I have rarely allowed any of my patients to apply the bandage themſelves, and have always been careful of drawing it tight, it is not likely this painful œdema ſhould have often fallen in my way. The ſingle inſtance I met with, however, has borne ſuch direct teſti-

mony to the obſervation of my correſpondent, (who is often obliged to allow diſtant patients to dreſs their own ſores for ſeveral days together), that it could not but appear to me as highly improper to overlook an obſervation, from which it is probable many patients may be benefited.

After what has been ſaid, another obſervation or two reſpecting the ſymptom of pain, is all that will be neceſſary. And here I remark, that ſevere pain muſt be mitigated, if it cannot be entirely removed, or nothing will go on well; whilſt the degree of pain, together with the nature of the diſcharge, will point out the moſt proper remedy for it; the quantity of the anodyne, is therefore not ſo much to be attended to as its effects. I have known excruciating pain from ſmall ulcers, almoſt entirely removed by half a grain of opium, taken only every other night, whilſt at other times, three or four grains have given but little relief.

In theſe caſes, the diſcharge is always thin and acrid; and though ſuch vitiated matter may ariſe from the morbid ſtate of the ſolids, and of the ſecretory organs of the parts, which throw off ſuch kind of fluids as cannot be changed

changed into laudable pus, yet this does not certainly ariſe from an inflammatory cauſe, and therefore is not always removed by antiphlogiſtics, and mere emollient applications; though it ever will be ſo, when that is the caſe. But if the habit is not particularly concerned, it depends more frequently upon a want of that ſpecies, or degree of inflammation, which is neceſſary to produce well concocted pus,* which is therefore often induced by ſtimulating applications, which are the moſt ſafe and rational means of promoting it, and will, in this caſe alſo, as certainly be followed by a ceſſation of the pain.† And

* La ſeconde cauſe (du defaut de ſuppuration) eſt le defaut d'inflammation dans la playe. *Traitè des Ulceres, &c.*

† PAREY ſpeaks exactly to this purpoſe in the cure of ulcers, *lib. xii. caſ.* 9. where after having directed cataplaſms of ſolanum, cicuta, poppy ſeeds, and ſometimes opium; ſhould theſe fail to procure eaſe in ſome caſes, he adds, "neque anodynis, neque narcoticis, ſedari poteris, imò blandis medicamentis appoſitis magis ac magis irritabitur. Itaque ad catherætica confugiendum erit, nempe fortibus morbis fortia remedia ſunt optima. Quare ulceri imponatur pulvillus forti et viribus aucto egyptiaco, aut paulo oleo chalcanti imbutus, his enim domandi efferi illius doloris vis eſt." To this he adds, "interim ulceri circumponetur refrigerantia, ne virium remediorum vehementia fluxionem excitet."—But this latter is greatly obviated by the uſe of a proper roller.

herein we go back as far as relates to ulcers on the legs, to the practice of the ancients,* whoſe ointments, it has been noticed, generally conſiſted of the warm gums, ſpirits, and eſcharotics, which though, in many caſes, juſtly exploded from practice, in the treatment of ulcers in general,† are of admirable efficacy, in ſuch as attack the lower extremities.

What has been ſaid will probably be quite ſufficient on theſe heads; we have here manifeſt indications before us, and the remedies are therefore uſually ſimple and obvious—not always thought equally evident through the whole indications of cure.

* See GALEN, particularly his book *De Compoſit. Medicament. ſecundum Genera*, and CELSUS. *Lib. v. cap.* 26.

† See BELL, On Ulcers; who has made ſeveral very uſeful obſervations on this head, though the *French* ſurgeons are ſtill of a different opinion, (as appears from their 4th volume of *Memoires de Chirurgie*), and indeed ſome latitude muſt be allowed; for the fact is, that in the cure of every ulcer, as of fever, a certain degree of inflammation, or exertion of the ſyſtem is neceſſary, and too little, or an undue effort, does as certainly, though upon a different principle from Plethora, fruſtrate the ſalutary intentions of nature.

SYSTE-

SYSTEMATICAL writers, who have been fond of multiplying diſtinctions of ulcers, have been equally preciſe in their directions for obtaining a cure.* We are to digeſt, deterge, incarn, and cicatrize; ſinuſes are to be laid open, callous edges are to be removed by the knife, or deſtroyed by the actual or potential cautery; ſome intemperies is to be corrected, or the whole habit to be altered: and above all, they adviſe a horizontal poſition of the limb, and injoin abſolute reſt. The whole proceſs of cure is moſt accurately delineated, and ſome appoſite remedy preſcribed to effect every intention, as if art were ſufficient for it all, and nature had nothing to do in the buſineſs. And indeed, were ulcers ſuch very tractable, methodical things, as the picture repreſents, memory might ſupply the place of judgment, and this part of ſurgery would be reduced to arithmetical exactneſs. But he whom practice has made moſt converſant with nature, well knows that her operations and the arrangements of ſcience too little reſemble each other.

* Compoſiti ulceris ad curationem multæ ſunt indicationes propoſitæ. PAREY.

It is univerſally admitted, however, that except an ulcer becomes clean, it will not cicatrize, though practitioners are not ſo well agreed, concerning the beſt means of bringing it about. But we are always to know our proper place, art being in this, and in every other inſtance, a mere hand-maid to nature, to lend aſſiſtance in a manner the moſt agreeable to her own laws. In the introduction to this little work, an attempt has been made to reduce the principles of the cure of ulcers to two only, viz. an attention to the general vigour of the conſtitution, and to the action of the parts; but with this view, it may be neceſſary to pay ſome regard to the nature of the different proceſſes that are going on in the healing of every ulcer. There is, it has been intimated, a production of new ſubſtance in its cavity, and a condenſation of its ſurrounding parts to a certain level and extent. The former of theſe, indeed, is, I believe, very inconſiderable; it is, however, by the union of the two, that nature accompliſhes her end. That theſe proceſſes do take place, may be known by an examination of the ſubſtance which is formed in the cavity of every cicatrized ulcer; and by the apparent evenneſs of the

the newly formed cicatrice with the neighbouring parts. And every one muſt have obſerved, that the loſs of ſubſtance is more evident at ſome months diſtance from the time of cure,* than on the firſt healing of the ſore.

Now, if the principles I have all along been laying down, as well as thoſe laſt mentioned, are at all juſt and rational, they will at once ſerve to diſcover the impropriety of depending upon very mild applications,† whilſt they inforce the expediency of the means I have recommended.

THE Cure, it has been ſaid, is brought about by the general vigour of the ſyſtem, and the

* This obſervation has been long made in the caſe of thoſe foveolæ which remain after the ſmall-pox.

† Perhaps the very beſt of theſe is the ſuppurative poultice ſo much recommended by Mr. FREKE, but it does nothing without the horizontal poſition of the limb; and has even then been too frequently ineffectual, or it is probable, would not have been diſcarded from hoſpital practice. His intention, however, was perfectly rational, which was, "to ſweat out the diſeaſe:" an idea I have always had in view, in oppoſition to that of drying up diſtempered parts; which muſt always be wrong. But the former intention may be much better accompliſhed by other means, that do not require reſt and confinement.

action

action of the parts, together with an abſorption of thoſe contiguous to the ulcer, the moſt appoſite to which indications, are good diet, exerciſe and bandage, with the external uſe of invigorating applications: and how much may be effected by them, experience alone can demonſtrate, and it is a principal deſign of this treatiſe to ſet forth. I am happy, however, to find an author of conſiderable eſteem, and amongſt the beſt of the later practitioners, ſo much of my mind, I mean WISEMAN, who had continual recourſe to warm and active applications, and rarely dreſſed an ulcer on the leg in the firſt ſtage of the cure, without merc. corroſiv. ruber in one form or other. By this means, and the help of a roller, or laced-ſtocking, he ſucceeded much better than moſt practitioners have done ſince, with all our improvements.* And I am ſa-

* Notwithſtanding all ſciences have been improved by reducing them to a ſtate of ſimplicity, yet, in an attempt to purify them, artiſts have been ſometimes led to overlook the principles on which ſome practice has been founded, and have therefore diſcarded many things that were valuable—like ſome unprincipled empiric, who in order to get rid of an imaginary ill-humour in the blood, directs ſo large a quantity to be taken away, as reduces his patient to a worſe diſeaſe than he laboured under before; forgetting that the good and bad blood would run out together.

See *Thoughts upon Amputation* by Dr. KIRKLAND.

tisfied

tisfied from what I have experienced, that had he allowed his patients to walk, and by the help of a flannel roller, had made a ſtill tighter compreſſion than the laced-ſtocking can pleaſantly admit, or indeed can effect, and had been yet bolder in the uſe of ſtimulating applications, he would not have had reaſon to complain, that healing ſome kind of ulcers is in general only a palliative cure. For it has been very evident in reading his caſes, and comparing them with my own experience, that the principal things which he failed in (beſides forbidding his patients to walk, which it ſhould ſeem, was not, however, always the caſe), was the not continuing his ſtimulating applications much longer than he did, and his changing them for very drying ones in the end, in order to haſten the formation of the cicatrice. See his caſes, in chap. x. particularly; in reading which, I could not avoid being ſurprized he had not himſelf made the remark. The like obſervations may be made on Dr. TURNER, who was in many reſpects but a copyer from him, but in others, ſeems to have had an advantage; and had he been well acquainted with the uſe of the roller, and been leſs fond of abſtinence and reſt, would have ſet an example, which after-practitioners

titioners would have made but little improvements on.

THESE things then, viz. Exercise, Bandage, and active Applications, may be solely depended upon in ordinary cases; and where there is no specific poison, nor other manifest evil in the habit, they will effect every thing in this class of ulcers, which art hath hitherto accomplished by rest, diet, and medicine; and will, moreover, effect such a cure as will stand through all the ordinary situations of life.

Any common digestive is rendered detersive in the degree it may be thought fit, by the addition of a little calomel, corrosive sublimate, the white, or red precipitate, or by a small portion of verdigrease; or we have a very excellent one ready made to our hands, the ung. hydrarg. nitrati: but, however uncommon the practice, it is sometimes better to use the red precipitate alone in the first stage of the cure, than to mix it with the digestive; and this the ulcer will also readily bear, when exercise, and a good diet are allowed. And here it is, that the judgment of the surgeon discovers itself, in adapting his dressings to the

the nature of the ulcer, which (laying aſide the refinements, and nice diſtinctions I have ventured to diſcard,) muſt by one mean or other, be brought to diſcharge laudable pus, whatever appearance its ſurface may have; for nothing goes on well till this is effected. On the other hand, ſurgeons have generally been too eaſily ſatisfied, eſpecially in regard to old ſores; and if the ulcer has but appeared clean, it has been preſumed, that all has been going on well. To this end, therefore, various trifling applications have been made uſe of, ſuch as waſhing with a ſtrong decoction of hemlock, dreſſing the ulcer with the gaſtric juice, and other light ſtimulants, or aſtringents, or covering it with ſedative and emollient poultices. But all this is inviting a ſore to heal up at any rate, and by leaving the diſeaſe at the bottom, has inſured its breaking out again. But not only muſt the ſurface be clean, but the granulations firm, and ſuch a plentiful digeſtion promoted, as may liberate the veſſels, reſtore the due tone of the parts, and furniſh laudable pus. This, the moſt inveterate ulcers on the legs may be brought to afford, as freely as ſores ſeated any where elſe; unleſs, perhaps, thoſe on the head are excepted, which, I think, furniſh pus more perfectly

fectly *album, læve, et æquale*, than thoſe of any other part.

Probably nothing but experience can induce any one to think, how eaſily this may, in ordinary caſes, be effected by powerful digeſtives, and exerciſe, and how ſoon afterwards many troubleſome ſores put on a proper appearance, and are brought into a healthy, and healing condition. But where theſe things fail, recourſe muſt be had to more powerful means,* and ſuch as no ſurgeon is ever at a loſs for; which if freely applied, interpoſing lenient applications if the appearance of the ſore ſeems to demand them,† will deſtroy the foul ſurface, and give nature (aſſiſted by a good diet) an opportunity to exert herſelf; and as *Hoffman* ſays on this very occaſion, "ex voto ſuccedit conſolidatio."

* "Vulnera maligniora valentioribus egent remediis; imbecillioribus, autem, mitiora."

GALEN. *De Compend. Med. Lib. iv.*

† In caſes wherein the author has made uſe of any remedies out of the common way, he has in this edition pointed them out, and deſcribed the kind of ſores that may call for their uſe; though in this claſs of ulcers ſuch inſtances are very few.

Perhaps,

Perhaps, one of the beſt applications of this kind, is the merc. cor. ruber, very finely levigated; this is peculiarly uſeful in ſome ſmall and obſtinate ulcers preſently to be noticed, nor will it be immediately ſuſpected, with what freedom, and frequency this active mineral may be applied. It may be ſaid of this, as *Hippocrates* ſays of frictions, that it ſoftens the hard, ſtrengthens the relaxed fibres, deſtroys the unſound, ſtimulates and elevates the growing fleſh; that it promotes, or diminiſhes diſcharge, and keeps open, or heals up the ulcer, juſt as you would direct it. Nor is this ſaying too much of it, with reſpect to a great number of caſes, for all this is a very certain conſequence of a proper uſe of it, where a tight bandage is applied, and adequate exerciſe allowed. But then, it has been hinted that, for ſome of theſe purpoſes, (which will hereafter be ſpecified) it muſt be uſed with great freedom, and be often repeated; and inſtead of being lightly ſprinkled over an ill-conditioned ſurface, the ulcer muſt be filled* with it, the ſurgeon taking up a large pinch of it, and plugging up the ſore.

It

* While I was engaged in drawing up this little tract, I chanced to meet with more authority for the above practice than

It has been ſaid, that the above practice is particularly uſeful in many ſmall ulcers; but even in large ſores, ſomething of the ſame kind will be found neceſſary. The foul ſurface muſt be removed, and the ſore brought to the ſtate of a freſh wound, which can be done only by the diſtempered parts being melted down (as it is uſually ſaid) by powerful digeſtives, or deſtroyed by corroſives; and till this be done, ſome obſtacle or other will continually ariſe,* but this once effected, you remove the greateſt hinderance to the cure. And it may be more eaſily done than is gene-

than I expected, for looking over WISEMAN, I found him making uſe of the very expreſſion; to which practice, I am ſatisfied, he, as well as Dr. TURNER, owed much of their ſucceſs. The former tells us he performed cures on ulcers of the legs in as few weeks, as the patients had been years under the hands of thoſe he calls the barber chirurgeons of the time. *Book ii. Chap.* 9.

* Ulceribus haud diligenter deterſis, hyperſarcoſis ſupervenire ſolet. PAREY, *De Ulceribus.*—See alſo RHAZES, *Lib. Divis. cap.* 134, 138. In which caſe (ſays a modern writer) "the granulations are either ſoft and ſpongy, and ariſe only from the ſurface of the ulcer, or elſe riſe too high in the form of fungus, or ſoon ceaſing to ſhoot, are not followed by a diſpoſition to form a cicatrice; or if the ulcer heals, it ſoon breaks out again."

rally

rally imagined, and though the ſucceeding ſurface ſhould put on the ſame unpleaſant appearance, after the firſt, or even ſecond application, yet the amendment, though gradual, is certain, and the pain is leſs ſevere than might be expected. The digeſtives are ſtill continued when the eſcharotics are left off, and the parts being, by theſe means, put into action, in general nothing further is required, than to wait till nature is able to accompliſh her proper work. The want of this ability, or occaſion to exert herſelf, is the grand impediment to the cure, but this reſtored once and again, will effect every thing that is required.*

* From the very judicious obſervations on the *Malvern-waters*, with caſes annexed, publiſhed by Dr. WALL, it ſhould appear, that the good effects produced by them on ulcers of the legs, have ariſen from their volatile ſpirit. Such an idea agrees very well with the theory I have adopted, and which every day's experience has confirmed. Dr. WALL, indeed, in one place ſpeaks of the coldneſs, and aſtringency of the *Malvern-waters* externally applied, but this is only an opinion he has taken up from ſome caſes, in which they had not proved beneficial; for he obſerves, they often occaſion ſo great heat in the part as to induce ſuppuration in cold tumours, and that in almoſt every caſe where they have been uſeful, they have raiſed more or leſs inflammation, and have often occaſioned very conſiderable pain for ſome days.

Beſides the abovementioned uſe of the precipitate, for the purpoſe of bringing foul ulcers into a good ſtate, it is not unfrequently neceſſary in order to preſerve them ſo, and to promote incarnation; and even in this view, it often anſwers much better by being ſprinkled upon the ſore, than mixed up with the digeſtive. I know how much that mode has been objected to by the late Mr. S. SHARP, who both as a writer and practitioner, I ſhould be more inclined to envy than to cenſure. Nevertheleſs, experience is the beſt teſtimony, and has demonſtrated to me how much, and to how great advantage, ulcers on the legs will endure the uſe of precipitate. Perhaps, an inattention to this, has been one occaſion of the very unfavourable opinion ſurgeons have always entertained of ſore legs, and of the difficulty of their cure; but ſo various are the inſtances I have ſeen of the ſpecific power of precipitate, in different kinds of ulcers, where every common application had been uſed to no purpoſe, that I can recommend it with more confidence than ever. I do not ſpeak merely of foul, or callous ulcers, but of thoſe very aptly denominated *dyſepulotic*, wherein nothing has appeared particularly amiſs, but there has been no diſpoſition to heal. The

ſurface

ſurface of ſuch ſores has ſometimes been glaſſy, and the edges ſharp and angular as if newly divided with a knife, without the leaſt diſpoſition to granulate or incarn, but at the ſame time not of that irritable nature which inclines them to ſpread; which I ſhall ſpeak of under the next head. The free uſe of the precipitate, for four or five days, though it has, indeed, ſometimes produced little ſloughs; which, however, have not ſeemed to render the ſores deeper; has put the atonic parts into action, and like the exhibition of the cortex on ſimilar occaſions, has removed every unkindly appearance, produced a diſcharge of good pus, and diſpoſed the ulcer to heal. I have already hinted in another place,* that this ſtands no longer on my authority; the accounts I have been favoured with from different practitioners, both here and on the Continent, ſince the firſt edition of this treatiſe, bear a direct teſtimony to the advantages the Public has derived from the hints I then ventured to throw out. Patients have alſo been treated in this way in different hoſpitals, where the good appearance of large ulcers, repeatedly covered with precipitate,

* Additional Preface to the former Edition.

has fully anſwered every expectation I had formed, or had previouſly experienced in my own practice. Some conſiderable knowledge in the profeſſion, as well as experience of this plan, and attention to the effects of the remedies, are, indeed, eſſentially neceſſary, by which alone the practitioner can be enabled to judge how long he may continue the bold uſe of ſo active an application: for it ſometimes happens, that one day too long will offend a ſore that has been inexpreſſibly benefited by its uſe; whereby the cure will be retarded. And if the plan has met with leſs ſucceſs in hoſpitals than in private practice, it is not unfair to attribute much of this, not only to the foul air of the wards, and the improper manner in which (it has been noticed) a tight bandage is ſometimes applied, but to the inattention or ignorance of ſome of the pupils in this reſpect; it being impoſſible for the ſurgeon, in every caſe, to lay down rules ſufficiently preciſe for the pupils to follow, which conſtrains him to ſubmit things of leſs moment to the temporary diſcretion of the dreſſers.

HAVING ſo fully ſtated, and endeavoured to defend the principles and practice laid down, it remains only to collect them into one point of view; and then to ſelect a few of the varieties

eties of ulcers to be met with in this claſs, with the treatment of each, as illuſtrative of the ſeveral indications and remedies propoſed. And to this end, it ſeems only neceſſary that the reader ſhould be reminded of what has all along been obſerved of the peculiar circumſtances of ſores on the lower extremities, and of the cauſes and operation of theſe peculiarities.—To obviate the force of theſe, by proper bandage, and other ſuitable topical applications, and general remedies, tending to remove, or correct, the atony, and other ill-diſpoſitions of the parts, and both enable them, and the ſyſtem at large, to make ſuch well-directed and ſalutary exertions as ſhall place ulcers, ſo ſeated, in circumſtances as ſimilar as may be to thoſe on other parts of the body, has been the leading idea throughout this work. How far this reaſoning may have been juſt, or the means above pointed out may appear rational and adequate, the reader himſelf is now called upon to decide; whilſt the author, for his part, has the ſatisfaction of thinking, that ſucceſs has, at leaſt, juſtified his attempt, and given ſome ſanction to the practice he ventures to recommend.

AMONGST the few inſtances to be ſelected from particular caſes, is a ſmall ulcer, fre-

quently hinted at, and for which, after every other mean has failed, the precipitate, or other eſcharotic is a ſpecific. It is improperly accounted ſcorbutic, and particularly affects the parts about, and even below, the ankles; which, indeed, cannot therefore properly be called a ſore leg. This is exquiſitely painful, and for ſome time appeared difficult of cure without reſting the limb, ſo little advantage being obtained from the roller; which cannot be made to afford much compreſſion below the ſeat of the ſore. It was in theſe caſes more eſpecially, that *Wiſeman* preferred a laced-ſtocking, becauſe (as he tells us) he "could not with a roller make a ſuitable compreſſion ſo near the ankle, without cauſing a ſwelling on the foot." But this is certainly a miſtake, for having, at firſt, found the ſame difficulty, I was ſoon able to remedy it, by carrying the roller ſeveral times over the ankle and foot, ſo as to leave no part but juſt the point of the heel uncovered by the roller; and by this means, I alſo make a tolerable compreſſion below the ulcer itſelf: to which intentions, the circumſtance of the roller being made of flannel, very greatly contributes. Theſe caſes are often attended with a conſiderable puffineſs, and a tetterous appearance of the ſurrounding ſkin, accompanied with a thin

thin and acrid diſcharge, which renders the parts additionally tender; whilſt the little ulcer is almoſt perfectly dry, and cannot eaſily be brought to ſuppuration, till the complaint of the ſkin is removed. This I once thought was relieved by bathing the parts in *Nevilholt* water, as lately recommended for this purpoſe, but I ſoon learnt, is much more ſpeedily removed by drying applications, which inſtead of the common cerate, may be ſpread on lint, or linen cloth, and applied over the uſual dreſſing to the ſore; for which common treacle is often a very good one, as well as for many other irritable ulcers. The outer dreſſing may conſiſt of cerat. alb. with bole and powdered alum; or the ung. deſiccativ. rubrum, or in more obſtinate caſes, a compreſs of linen may be wetted in a ſolution of ſacch. ſaturn. and vitr. alb. with an ounce or two of camphorated ſpirit, in a pint of ſpring water; which, notwithſtanding the tumour, and heated appearance of the part, I never found diſagree.* If the ſore ſhould not ſoon change its complexion,

* Theſe affections of the ſkin, vulgarly called ſcorbutic, have uſually no one ſymptom of that diſmal complaint, and being merely local, ſhould always be treated as a diſeaſe of the ſkin; for true ſcorbutic ulcers are of a very different

complexion, on the diſappearance of the affection of the ſkin, the little ulcer ſhould be filled with precipitate,* pulv. angel. diſſolved lunar cauſtic, or any ſimilar eſcharotic, and when the ſlough is come out, be immediately repeated, if the ſore ſhould not then put on a kindly appearance, which it certainly will in a very little time; but the cure will not ſtand if this be neglected. But though ſo much has been ſaid on the bold uſe of very deterſive, and even eſcharotic applications, it is to be remembered, that recourſe need not always be had to them in the firſt inſtance; but whenever leſs active means, aided by the bandage and exerciſe, ſhall prove ineffectual, I reſt it

kind, and will not endure the uſe of eſcharotics. See Dr. CULLEN's *Synop. Noſolog.* alſo Dr. LIND, on this diſeaſe. *Part ii. chap.* 2.

* WISEMAN ſpeaking of ſuch an ulcer, has this bold expreſſion, which I doubt not was the reſult of experience, "the beſt anodyne had been to have filled it with precipitate." *Book ii. ch.* 4.—He was not afraid of the conſequence mentioned by *Hippocrates*, or knew better how to diſtinguiſh caſes, than to be in any danger of the evil he mentions; who ſays, "Thrinon Damonis filius, habebat malleolum ulcus, juxta nervum ſanè non purum, huic a pharmaco corroſo contigit, ut opiſthotonos moreretur."

Epidem. Lib. v.

upon

upon every man's experience to demonſtrate the utility of them.

There is nothing I can be more ſatisfied of, than the propriety of the method here recommended. There is no ſmall ſore on the leg uſually ſo troubleſome to heal, by ordinary means, as an old ulcer near the ankle, and there are ſcarce any of the ancient writers but mention it as ſuch; whereas, there is no ulcer on the leg, that is ſo eaſily, ſoon, and certainly cured, when properly treated. The numbers, and variety I have ſeen, leave me no room for doubt on this head; of which ſome have been from three to thirty years ſtanding, breaking out again as conſtantly as they were healed, and inexpreſſibly painful. But if not of the phagedenic kind (of which I ſhall treat in another place) are perfectly cured, in a few weeks, by taking much exerciſe, and dreſſing with the warmeſt digeſtives, or (where theſe fail) by a free uſe of precipitate, and a bandage. This may be very tightly applied, if no true inflammation attends, or as ſoon as this ſhall be removed by bleeding, and a few days application of FREKE's ſuppurative poultice;*

* See his *Art of Healing*—his poultice conſiſted of figs, onions, marſhmallows, and white lily roots.

which

which it will be ſometimes proper to begin with, if the ulcer is deep.'

Since the firſt edition, I have had an inſtance of the efficacy of the precipitate, in a ſore on my own ankle occaſioned by a burn. A ſmall and very painful little eſchar was formed, which, after I was tired of poultices and other emollient applications, and common digeſtives, I loaded with precipitate twice a day, and applied a tight flannel roller; which I ſhould have done ſooner, had it not been ſo recent a ſore. The ſmall ſize, and dryneſs of the ulcer, induced me to dreſs it ſo often; and by this means, a kindly ſuppuration ſoon took place, which ſeparated the ſlough. Imagining, now, the little ulcer might be healed by any common means, I made uſe only of a few turns of a linen roller, to ſecure the dreſſings, and for ſeveral days, applied nothing but ceratum album, and afterwards, common digeſtives; but one ſlough formed after another, whilſt under this courſe. I then returned to my flannel roller and dreſſed again with precipitate, which I ſprinkled on the ſore every day. After this no more ſloughs appeared, and the ulcer healed kindly, under the conſtant uſe of the precipitate.

There

There is another ſpecies of ſmall ulcers, accounted difficult to heal, that is likewiſe, improperly, termed ſcorbutic, and is exceedingly painful, though without any tumour of the limb; and ſometimes attacks young and robuſt people. Theſe ſores are diſperſed over a great part of the leg, particularly along the ſpine of the tibia; are generally round, and rather deep, with thickened edges; and are often not larger than peas: whoſoever has once noticed them, will readily diſtinguiſh them from every other ſore. Though difficult to be healed, and diſpoſed to break out again, as they certainly are, when treated upon the lenient plan, frequently nothing more is neceſſary than to bathe the limb for a few nights in tepid ſalt and water; to dreſs the ulcers with precipitate and digeſtive, and apply a very tight bandage, which immediately removes the pain; and I have known ſuch ulcers, though of long ſtanding, perfectly healed in ten or twelve days. Should others, however, prove obſtinate, from having their ſeat on more tendinous parts of the leg, the ointment muſt be made more active by the addition of a little lapis infernalis; which forms an admirable dreſſing for many dyſepulotic ſores.

There

There are other ſmall old ulcers, which often require a peculiar kind of dreſſing, merely from their being ſeated on tendinous or ligamentous ſurfaces, ſuch as the inſtep and lower parts of the leg. On this head, I need only to obſerve, that common treacle with freſh lemon juice boiled up in it, agrees with them ſo well, that they require nothing more, unleſs it be to have the ſurrounding parts touched with a lotion of the tinctur. martis cum ſpir. ſalis, ſufficiently diluted; both which applications ſhould be continued as long as the ſores remain in a very irritable ſtate. I ſhall juſt remark, that the like dreſſings agree equally well with many foul ulcers, that are irritated with moſt other dreſſings.

I have alſo met with other deep, and painful ulcers, ſomewhat larger, of no regular figure, nor confined to any particular parts, for which the fine powder of bark is often a good dreſſing. After the ulcer has been filled with this, morning and night, for a few days, and covered with a good digeſtive, ſuch ſores will begin to fill up with firm and florid granulations, and will loſe their morbid ſenſibility; but if they ſhould not, the ſurface muſt be deſtroyed by precipitate, as formerly

merly directed, and trial made again of the bark, if it ſhould ſeem to be neceſſary.

In ulcers of long ſtanding, and where the conſtitution is thought to be concerned, it ſometimes happens that beſides a large ſore, the leg ſhall be exceedingly ſwelled, with hard tumours, or lumps, in one or more parts of it, which will not always be diſſolved by the diſcharge. But while this is kept up, the application of a large piece of oil'd-ſilk will produce the happieſt effects, and with ſafety diſperſe the indurations. And as it ſometimes happens, that the other leg will be equally ſwollen, and exceedingly hard, though without ulceration, that ſhould likewiſe be rolled, and covered with a like piece of oil'd-ſilk; which, by exerciſe, will daily produce a conſiderable perſpiration, and without the leaſt aſſiſtance from medicine, will bring down the hardneſs and ſwelling, by the time the ulcer on the other is healed. This direction, however trifling it may appear, I have found ſuch evident advantage from, that I think I ſhould not have done juſtice to my ſubject, if I had not made particular mention of it. For the like purpoſe, the leg may be well rubbed with volatile liniment and about an eighth part of mercurial ointment; but I think, I have never

never found occaſion to have recourſe to any embrocation for this ſpecies of ſwollen leg, ſince I firſt made uſe of the flannel roller and oil'd-ſilk.

HAVING now ſaid every thing that can be neceſſary, with reſpect to cleanſing and incarning, and pointed out a few uſeful medicines, and ſome particular caſes in this claſs of ulcers, I ſhall cloſe it with ſome obſervations ON healing; an article of as much importance, as any that has been noticed.

THIS laſt proceſs of nature is by no means to be hurried; and if every thing is right, and the bottom of the ulcer become ſound, no particular means will be required for it, it being, in general, ſufficiently diſpoſed to heal of itſelf, and will, even with the uſe of ointments not a little deterſive.* For it is ſuppoſed (as will ſoon be explained), the more active ones have been weakened already, but not ſo much as to become mere greaſy applications; which (eſpecially warmed ones,†)

* WISEMAN particularly notes having cleanſed, incarned, and healed ulcers on the legs, by the uſe of precipitate.

† See BELL, *On Ulcers*, in regard to the relaxing nature of warmed applications. *Medio tutiſſimus ibis.*

upon

upon this plan, do as much injury, by relaxing the parts, as do very drying applications, when uſed to haſten the production of cicatrice.

If this latter be attempted too ſoon, and eſpecially if early recourſe be had to drying applications, the ſurgeon will ſoon perceive his miſtake. The ulcer being only partially digeſted, like thoſe treated upon the lenient plan, when apparently about to heal up, will burſt out in one form or other. This will eſpecially follow in thoſe termed conſtitutional ſores, attended with diſeaſed ſkin, and of very long ſtanding. Here ſmall ulcers will be formed in the diſtempered parts of the ſkin, which in a while becomes pappy, and denotes the parts underneath to be unſound. Hence matter may be forced up by preſſure, through many little orifices, putting on ſuch an appearance of diſeaſe throughout a great ſurface of the limb, as may diſcourage the ſurgeon from expecting a cure, without a great length of time, and aſſiſtance from reſt. But all will go well notwithſtanding, under the advantage of good rolling and exerciſe, if the diſcharge be kept up; for the exerciſe, inſtead of protracting the cure, I am ſatisfied,

tends

tends in ſuch caſes, directly to enſure it; and I accordingly always deſire it may be increaſed. All that can be neceſſary, is to lay the ſmall contiguous ſores into one, by a ſlight touch of the lancet, which will afford very little pain, as the parts are now become perfectly ſodden, and the ſkin parted from the edges of the ſore; or ſhould this be objected to by the patient, the little holes may be filled up, once or more, with precipitate, and the cure will go on as effectually, and almoſt as ſpeedily as could be wiſhed.

It was ſaid, the digeſtive or other dreſſing, after a time may be weakened, and this may be done without improperly diminiſhing that diſcharge, which it has ſo often been inſiſted upon ought to be kept up: for when the moſt active remedies have been uſed, in bad caſes, for two or three weeks, the ſtimulus from exerciſe will ſufficiently maintain it; and it is a good maxim to proceed gradually to that change between a copious diſcharge, and its total ſuppreſſion, which ſhould be always kept in view through the whole of the cure.

As ſoon then as the ſore, however large, puts on a perfectly healthy appearance, this change

change in the dreſſing ſhould begin, which ſhould be repeatedly weakened, three or four times, at ſuch intervals as the ſize of the ſore, and the time ſuppoſed neceſſary for its cure, ſhall point out. But great caution is required not to be too haſty in this, or to continue it, if the diſcharge is ſtill very conſiderable. An attempt to ſuppreſs this is always improper, and if it ſucceeds, will, indeed, divert the diſcharge ſome other way for a time, but without any advantage to the patient; and the matter inſtead of burſting through the ſkin, where that happens to be diſeaſed, will form a paſſage in different places through the ſurface of the ſore. In this caſe, the bandage ſhould be drawn tighter below the ſeat of the ulcer, and the matter by preſſure with the fingers, at each dreſſing, ſhould be carefully forced up; the ſurgeon muſt likewiſe return to more active applications, by which the ſore will ſoon recover a more pleaſant appearance. But if no ſuch change ſhould preſently take place, either more time is required to cleanſe ſome diſtempered parts in the ulcer, or elſe the whole ſore is unſound to the bottom. In the former caſe, time, it has been ſaid, will do every thing that is wanted; but if it does not, recourſe muſt be had again to eſcharotics,

which if the bone be not diſeaſed, will invigorate the parts, and ſoon improve the diſcharge; or if ſtronger be uſed, a thick ſlough will be made, and the ſurface, the moment that is thrown off, will be clean, and will put on a promiſing appearance again.

Upon this head it may be proper to obſerve, that when large and old ulcers are brought to a copious diſcharge, whilſt the ſurgeon, from their unkindly nature, is afraid of too haſtily weakening his dreſſings, though the ulcer may be very conſiderably diminiſhed in ſize, it will often be proper to defend its tender edges, and new ſkin, as it is called, with a little cerat. epulot. or ſome ſimilar application. But it may be ſtill better, in very irritable ulcers, and ſuch as are much indiſpoſed to heal, to ſpread a margin of cerate on the ſame dreſſing, that the whole may be covered with one piece of lint, by which means the diſcharge finds a readier way to run off; a matter of the greateſt importance in ſuch ulcers as are eaſily offended. The pledgit, for this reaſon, ſhould likewiſe extend conſiderably beyond the ſurface of the ſore, eſpecially in ſmall ulcers, or the tightneſs of the bandage will prevent the matter from eſcaping, and thereby occaſion a continual

tinual irritation, which will diſpoſe the ulcer to ſpread.* But though cerate is allowed of with

* The doctrine here inculcated, though founded upon repeated facts, I find ſtrongly controverted by *Mr. Hunter*. "When treating of pus, in my lectures" (ſays that teacher) I obſerved, that I was inclined to believe that no matter, of *whatever kind*, can produce any effect upon the part that formed it: nor do I believe that the matter of *any* ſore, *let it be what it will*, ever does, or can do any hurt to that ſore; for the parts, which formed the matter are of the ſame nature, and cannot be irritated by that which they produced, except extraneous matter is joined with it.—If what I have now advanced is true, wiping, or waſhing away matter, under the idea of keeping the parts clean is *in every caſe* abſurd." See his Treatiſe on the *Venereal Diſeaſe*, page 36, *Note*.

It is ſomewhat unpleaſant to have to combat ſentiments with ſo reſpectable an opponent, whoſe experience as a ſurgeon, as well as his phyſiological attainments, might well claim a reverence from the moſt eminent practitioners. But the doctrine contained in the above extract ſeems to be far too *general*, and I think may lead to erroneous practice; for an enemy as I am to a ſcrupulous attention, and rude manner of always wiping off all the diſcharge that may be furniſhed by ulcers, I am equally perſuaded, that much matter confined upon them will often occaſion their ſpreading.—It is very pleaſing, indeed, to be able to account for the changes taking place in diſeaſes, and for the operation of certain remedies, as we are thereby often enabled to extend the application of the latter to different complaints, and render them more generally uſeful; but we may be too nice in our inquiries, and a turn for theory, and phyſiological diſquiſitions may poſſibly be carried too far; and cer-

with the view I have mentioned, the uſe of drying applications will, by no means, haſten the cure in this claſs of ulcers, which, perhaps, contains much the greateſt number.

It may then be laid down as a general maxim, that they ſhould rather be ſuffered, than invited to ſkin over; and to ſpeak plainly,

tainly are ſo, when not only unſupported, but contradicted by facts; as appears to be the caſe in the preſent inſtance. For though it is very probable, that the ſyſtem may not be affected by the abſorption of new venereal matter, any more than inoculated patients are by a freſh application of the variolous; there are, nevertheleſs, other ulcers that will ſuffer by the acrid matters which they ſometimes ſecrete. The diſcharge furniſhed by a cancerous ſore, it is well known, will erode the ſkin, and extend the dimenſions of the ulcer when not otherwiſe in a ſpreading or ſphacelating ſtate: and the like will happen to many other ſores when there is no admixture of foreign matters. To prove this, let an ulcer on the leg be dreſſed with a little white cerate, or any other bland ointment, ſpread upon lint, and afterwards with the like ſpread on a thin piece of ſponge, and the part be ſo rolled up as to confine the diſcharge: or ſhould the cerate be thought capable of communicating this property, the different appearances of the ſore will be ſtill more evident when dreſſed one day only with dry lint, and another with ſponge. In a certain ſtate of the ſore, when diſcharging plentifully, the ulcer will be either foul or raw, and its dimenſions increaſed, under the former, but will appear freſh, healthy and granulating, by means of the acrid diſcharge being more abſorbed by the latter.

I would,

I would, eſpecially in thoſe of long ſtanding, rather irritate than coax them, for I know they will heal in the end. And I wiſh to enforce this idea very ſtrongly, as of the greateſt importance,* and to recommend, in all ſuſpicious caſes, and eſpecially where ulcers have been diſpoſed to return, the long continued uſe of deterſive applications, not only till the ſores have long put on a very florid and healthy appearance, but almoſt, or intirely to heal the ulcer under the uſe of ſuch active applications; nor will even time always be loſt in ſo doing. For if every part is become perfectly ſound, the bandage will furniſh that warmth which inclines them to heal; whilſt on the other hand, if nature be not yet diſpoſed entirely to ſuppreſs the diſcharge, the ſurgeon, as hath been ſhewn, by attempting to heal up the ſore, will have great part of his work to do over again. For this reaſon, dry lint, blue vitriol,† or hard compreſs,

* Vide pages 36, 37, of the *Introduction*.

† WISEMAN experienced this in a caſe that appeared to be going on well, but ſuddenly turned foul, and in a few days became as bad as ever. *(Book ii. chap. 9.)* This, however, ſeems to have been his uſual method, and it muſt be acknowledged, that ſome ulcers on the legs healed in this manner may ſtand well, but there is no adequate rule to

preſs,* ſhould very rarely be had recourſe to; though I know they have ſucceeded for a preſent cure in ſeveral inſtances. The caſe, indeed, is different, when patients, at this period, are confined, dieted, and purged, (though upon that plan ſores are not ſo ſoon brought into a good ſtate;) ſuch applications may then both agree, and expedite the healing of the ſore: but ſuch ulcers being rather deſiccated by art, than cicatrized by nature, many ſuch patients muſt ſoon make application again.

The habit is to be firſt gradually relieved, and to ſpeak a popular language, the humours are to run off, and the change from a long accuſtomed, or copious drain, to be cautiouſly effected; but which gradually abating as the wound diminiſhes in its ſize, nature, however averſe to ſudden tranſitions, will when left to herſelf, in a reaſonable time find ſome other vent. This remark, and what has been ſaid

determine by; and therefore would a ſurgeon be certain of healing an ulcer, and perfecting a cure, that muſt not be his method.

* See Mr. ELSE's paper in the *Med. Obſerv. and Inquiries*, where he ſpeaks of covering the ulcer with a ſheet of lead; ſo alſo a late *French* author; though, indeed, the practice is very ancient.

above,

above, it will be ſuppoſed, is peculiarly applicable to ulcers of long ſtanding, but although in more recent caſes, it may not be ſo neceſſary that nature ſhould find ſome other outlet than the ulcer, nevertheleſs, all the above reaſoning, as far as it relates to practice, will generally hold good: though it may, perhaps, be better accounted for upon very different principles.* Experience proves that few ulcers on the legs, though brought into a clean ſtate, ought to be healed by any other means than preſerving them ſo, nor will any other, under the directions here given, in ordinary caſes, be found in the leaſt neceſſary. Every ſurgeon knows very well, that the great difficulty reſpecting the cure of ulcers, and more eſpecially thoſe on the lower extremities, is to bring them into a good and healing ſtate, and when that is accompliſhed an entire cure will follow of courſe. This is one reaſon that wounds on the head fill up ſo readily; they are not long in a foul ſtate, and therefore after

* Having already offered an opinion on that ſubject, (vide the *Introduction*, p. 40, 41.) when ſpeaking of the good or bad effects ulcers have on the conſtitution, which, it was ſaid, were probably rather owing to irritation than the diſcharge; it was more natural to expreſs myſelf here in the common language of writers upon this ſubject.

a few days uſe of ſome lenient digeſtive, want only to be kept clean, or at the moſt, to have their luxuriant granulations kept within bounds, which are merely a conſequence of ſtrong digeſtive powers, and of nature overdoing her part. But in the caſes before us, there is little of this to be apprehended, for it has been ſaid, the conſtant and firm preſſure from the roller, (which may be increaſed as may be found neceſſary,) will always keep down this looſe fungus. It will therefore be ſufficient to apply a mild, defenſive plaſter, or ſometimes one more drying, (as formerly recommended, if there are heats on the ſkin,) which ſhould be ſpread only on a piece of doubled linen, and be laid over the digeſtive; but if hard compreſs, or merely drying applications are laid on the ſore, the ill-conſequences I have mentioned will generally follow, or the ſore, for want of proper digeſtion, will break out again.

Upon the above plan, however, every objection to healing the ulcer, as well as our fears for its return, are ſufficiently obviated, and for want of which, the author of the paper in the *Medical Obſervations*, appears to have obſerved the above unpleaſant effects; for if old ulcers are dried up inſtead of digeſted,

geſted, and ſkinned over inſtead of being cleanſed and incarned;* if any thing is ever to be apprehended from the ſuppreſſion of an accuſtomed diſcharge, or the leaſt attention to be paid to the depending ſite of a wound, it is here we muſt expect all the evils that theory ſuggeſts, or experience is ſaid to have proved. But, indeed, it generally happens, that ulcers thus healed, form a callous cicatrice, which ſoon falls off when the parts are not ſound underneath, and ſo prevents the miſchiefs expected. Whereas, having thoroughly digeſted the ulcer, and brought it into a healing condition, leave it to nature at this particular period, and not only will the cure be effectual, but as hath been obſerved, will

* HIPPOCRATES ſpeaking of recent ulcers, hints at this expeditious method of healing under particular circumſtances, but how inapplicable to the caſes before us, reaſon and experience will determine—"aut ſi quis avertat (viz. ſuppurationem) ut omnino non ſuppurentur, præterquam neceſſario, eoque pauciſſimo pure, et ſicca ſunt quam maxime, ex medicamento non moleſto,"—though in another place he adds, "ulcera non purgata, non committi ſolent etiamſi adducuntur, neque ſua ſponte coeunt." *De Ulceribus.* § v.—No better proof however, need be ſought for, that ſuch is the general mode of treating ulcers of the legs, than the candid obſervation of the anonymous writer mentioned in the Introduction, page 39. *Note.*

often

often be accompliſhed in as little time, as it is uſually done by reſt, diet, and purgatives, with the aſſiſtance of all the alteratives, as they are called, that I have ever ſeen uſed.

One caution more, however, may be neceſſary, in regard to a circumſtance juſt now mentioned, the healing up with a callous cicatrice, or ſcab; oftentimes not eaſily avoidable indeed, and as ſeldom thought of upon the lenient plan, but almoſt uniformly an occaſion of ulcers breaking out again. This is, however, by no means ſo likely to happen upon the plan recommended, as under the lenient one, practitioners being often glad to get old ulcers healed by any means in their power, eſpecially in hoſpitals, which are crouded with them.

It were needleſs, I apprehend, to inquire into the cauſe of the breaking out of ulcers that are covered in part with a ſcab, though it were eaſy to adviſe a ſpecious theory; but the fact is a ſtanding one, that if ulcers are ſuffered to heal up before the whole of the ſurface has been covered with firm granulations, or if after this, they have been dried up with a thick ſcab, or ſuch be formed afterwards, they will be apt to break out into worſe

worſe ſores than before. Such ſcabs ariſe either from the ſurface of the ulcer becoming dry in different parts, in the form of iſlands, as they have been called, or from the thickening of the edges of the cicatrice. The former muſt never be allowed of in this claſs of ulcers; but ſuch ſpurious covering muſt be deſtroyed, the bottom of the ulcer, in ſuch parts, being unſound; no ſore on any other part of the body ever healing in that manner, when defended from the air. In the latter inſtance of ſcab, when the ſore is become ſmall, the edges of the new cicatrice are found, from day to day, riſing above the level of the ſound ſkin, as the cicatrice advances on the ſurface; and certainly indicates a ſucceeding ſcab. This is, therefore, to be prevented, eſpecially in ulcers of long ſtanding, or ſuch as have diſcharged very copiouſly, and in patients who have been accuſtomed to ſore legs. In order to prevent ſuch kind of healing, the new edges ſhould be well rubbed daily with an armed probe, or be ſcraped down with the ſpatula as long as they ſhall appear thick; and ſhould this not be ſufficient, they ſhould even be deſtroyed by lunar cauſtic, and the deterſive powers of the dreſſings be increaſed. This may be done by the unguent. hydrarg. nitrat. or the cerat. epulot. with precipitate, by which

ulcers

ulcers may be healed very kindly, and on the above account, I have obſerved this ſort of dreſſings are, in many caſes, preferable to a weakened digeſtive, in the laſt ſtage of the cure.

Only large ſores will afford any difficulty; whatever pain, ſwelling, or humours, ſo called, attend ſmaller ulcers (of this claſs), they will occaſion very little trouble, after the ſurgeon has had a little experience of this method of treating them. The copious diſcharge, which a proper diet, exerciſe, and the digeſtives always produce, remove theſe, and many other ſymptoms, that are found ſo troubleſome on every other plan; and ſoon bringing the ſore into a healing ſtate, uſually no further difficulties occur, if the bottom be ſound. If therefore, after this period, a large ulcer is found indiſpoſed to heal up, (though there be no other reaſon for ſuſpecting miſchief at the bottom) and the uſual ſtimulants are found ineffectual, the ſore after the uſe of them ſtill continuing at a ſtand; ſomething further is neceſſary: the powers of nature being, in ſome habits of body, often inſufficient to cover a large ſurface with new ſkin, without other aſſiſtance, and a very different ſtimulus, which will preſently be deſcribed.*

* See pages 178, 181.

THIS

THIS brings me to the Second Claſs of ulcers, which in ſeveral reſpects, requires a treatment different from the preceding. It was a juſt obſervation of *Ambroſe Parey*, " neceſſe quoque eſt varia adeſſe medicamenta, viribus pariter et virium gradibus diſtincta;" for ſays he, " nihil mirum ſit, ſi ſuo ſæpe excidant fine, qui eodem medicamento, omnia maligna ulcera curant, et ſanare ſe poſſe putant."*

Under this head then, I ſhall treat that ſpecies of ulcer called eryſipelatous,† or herpes exedens, occupying merely the ſurfaces of parts, which is always glaſſy, and in its firſt ſtage, eaſily offended by every unctuous application; alſo many ſmall ulcers, attended with an eryſipelatous affection of the ſkin, furniſhing a copious, and almoſt cauſtic diſcharge; the true phagedenic, and various large ulcers in very old, or poor people, and in patients of a relaxed fibre and habit; including every *very* large ulcer of long ſtanding, with the like pale, and looſe ſurface, the

* *Cap.* 9. *Lib. xii.* † *Introduct. p.* 6.

conſequence

conſequence of bad health, neglect, or intemperance. Not that I mean to imply that no *very* large ulcer will yield to the former method, nor that the means there laid down, have no ſhare in the cure of thoſe now to be conſidered, unleſs the eryſipelatous be ſaid to afford an exception; for whatever may be the circumſtances of the ulcer, it is to be digeſted and deterged, before we proceed to incarn.*

Theſe things premiſed, the cure of every ulcer is to be undertaken with the ſame intentions; powerful ſuppuratives, digeſtives, and deterſive applications are to be uſed, and we are to proceed to eſcharotics as occaſion may require. But when active remedies under every form are found to diſagree, after a ſore has been properly digeſted, and has put on a tolerable appearance, it is to be ranked in the ſecond claſs, however ſmall it may be; and eſpecially that ulcer, the moſt obſtinate of any, deſcribed under various names,† and uſually

* To incarn before we mundify, or deterge before we digeſt, is building without a foundation, or to lay ſuch foundation on the houſe-top. Dr. TURNER.

† Ἕλκος φαγεδαινικον, or Νομὴ of the Greeks.—Ulcus depaſcens, rodens, or ſerpens; ulcus ambulativum; ulcus putridum, et phagedænicum.—L'ulcere putride.

known

known amongſt us by that of putrid or phagedenic—I ſhall begin with the eryſipelatous.

I HAVE adopted this term, for the want of a better, to deſcribe an angry, ſuperficial ulcer, which is ſometimes likewiſe accompanied with an affection of the ſkin that will ſpread over the greater part of the leg; and chiefly attacks the aged and infirm. It always furniſhes abundance of thin, and very acrid diſcharge, eſpecially if the ſurrounding ſkin is affected, rendering the limb intolerably painful; and when the dreſſings are removed, frequently emits a ſteam like boiling water. I have known poultices and fomentations uſed for a long time to no purpoſe; the ulcer either not healing at all, or breaking out in freſh places almoſt immediately, and the pain ſtill increaſing. Purges likewiſe are here of no uſe; as to medicines, opium and bark ſeem of the greateſt avail: the pain muſt be mitigated, and the habit be ſtrengthened. The dreſſings ſhould likewiſe be calculated to prevent fluxion to the part, or but little advantage will be gained; and in this ſpecies, I have never ſeen any harm from ſuppreſſing the diſcharge, though the remedies ſhould increaſe the pain at their firſt application.

Having,

Having, in bad caſes, made uſe of a mild ſuppurative poultice for a ſhort time, to cleanſe the ſkin, and empty the little inflamed and obſtructed glands, by promoting their ſuppuration, I always apply ſome digeſtive to the deeper parts, for two or three days. After which, they may be dreſſed with an ointment made with as much true *Armenian* bole as *Goulard's* cerate will take up, or a cerate to which ſome fine crocus martis is added, inſtead of the pulv. lap. calamin. whilſt the whole limb, when the ſkin is affected, ſhould be well duſted with the fine powder of bark, or covered with the unguent. deſiccat. rubrum, and after awhile, with a compreſs wetted in the drying ſolution, made with ſacch. ſaturni and vitr. album, formerly mentioned,* to avoid loading the ſkin with the ointment. With ſuch applications, it will ſometimes be uſeful to give the cicuta, and aq. calcis minus compoſ. or the *Liſbon* diet-drink, where the pain has been ſo far abated as to admit of laying aſide the opium, and there is no peculiar indication for the bark. But if the above externals ſhould fail, recourſe muſt be had to the aſtrin-

* Page 135.

gent

gent ſolution, or ointment, I ſhall preſently make known,* which will certainly be effectual; and may, I hope, in many caſes, prove a valuable addition to chirurgical pharmacy. This is of itſelf, the remedy for thoſe ſmall ulcers attended with ſuch an affection of the ſkin, as will cauſe a ſteam to riſe from it like boiling water, which, after applying a poultice a few days, I am not afraid of ſuppreſſing by theſe means; and indeed have found medicines incapable of doing it.

Where almoſt the whole leg has been affected, a ſcurf, or ſcab, will remain for a conſiderable time, which muſt not be haſtily rubbed off. But the parts may, now and then, be touched with a little unguent. hydrarg. mit. and at other times be waſhed with the drying ſolution till the ſcales fall off of themſelves, or are very eaſily ſeparated; at which time the ſkin will be found, and perfectly ſmooth underneath. In all ſuch caſes, a piece of oil'd-ſilk, ſhould, now and then, be applied under the roller, about the time the ſcabs begin to looſen, though ſome of the ſores ſhould not yet be healed up; which will haſten the ſeparation of the ſcales, and take off the ſtiffneſs

* See pages, 178, 181.

of the limb. This ſhould likewiſe be worn for a ſhort time after the cure is completed, which it will contribute greatly to the continuance of, but muſt occaſionally be laid aſide, if it induces too great moiſture on the ſkin; and the flannel roller be continued.

There is a ſimilar, but leſs violent affection of the ſkin, attending not only this, but ſome ulcers of the former claſs, which may be treated in a manner that may appear ſtrange on the firſt mention of it, but is perfectly ſafe. This is lightly duſting the fretted parts with precipitate very finely levigated, which ſo far from increaſing the diſcharge, or aggravating this ſpurious inflammation, uſually checks them very ſoon; which it is evident ſuch a remedy cannot do improperly. I was myſelf ſurprized at the firſt good effects I experienced from it, after the afore-mentioned drying applications had proved leſs friendly to the parts than uſual. This appearance of the ſkin in common ſores, happens generally in the caſe of ſmall angry ulcers, where upon the healing up of one or more, others conſtantly break out; which nothing I have ever tried, ſo often prevents as the treatment here recommended. But ſhould any of the excoriated parts get deeper under this treatment, and a little ulcer be

be made, it will always prove leſs ill-conditioned than thoſe which had been ſpontaneouſly formed, and will be ſooner healed than theſe angry excoriations would be, by any ſedative, or drying applications. The diſeaſe ſeems to be in the ſebaceous glands, the nature of which, ſhould ſeem from the remedy, is an atonic, rather than phlegmonous diſpoſition of the parts.

FROM theſe I paſs on to the phagedenic ulcer; in treating on which, perhaps every thing will be ſaid, that can be neceſſary for any other large and troubleſome ſore, claſſed under this general diviſion.

This ulcer is always attended with an obſtinate callus on the edges, and on ſome parts of its ſurface; is often ſtreaked with red lines, and is foul, glaſſy, and ſmooth, or reſembles a newly made wound, where a portion of fleſh has been rudely torn away by the bite of an animal. It is very eaſily offended, and often ſpreads and eats like a canker, on the application of common eſcharotics,* (which, indeed,

* See FREKE's *Art of Healing*. See alſo PAREY from GALEN, "nam diuturnior, et copioſior ficcantium, et detergentium,

deed, it will ſometimes do under any treatment) the acrid matter either diſſecting its way between the muſcles, by deſtroying the cellular membrane, or elſe eating through the ſkin. Its edges always put on an irregular, and unkindly appearance, are often ſwelled, and ſtreaked with blood-veſſels like the bottom of the ſore, and are diſpoſed, from their laxity, to bleed upon the ſlighteſt touch. This ulcer generally takes place in the very pooreſt people, whoſe blood is broken down by hard labour, or intemperance; is very difficult to cure, and when very large often baffles every attempt of the beſt hoſpital ſurgeons.

There are, however, more ways than one of ſubduing many of theſe obſtinate ſores, and to this, the free exhibition of the bark will greatly contribute. The efficacy of this medicine may frequently be greatly increaſed by being joined with aromatics, or in women whoſe menſes are obſtructed, with chalybeates; which eſpecially in that form preſcribed by

" tergentium uſus, ulcera excavant indies; quare (ſays he)
" prudens videbit medicus, quando à valentioribus deter-
" gentibus, et corrodentibus ad mitiora ſit digrediendum."
" *Cap.* 9. *Lib. xii.*

the

the late Dr. GRIFFITHS, is, perhaps, the beſt remedy in chlorotic, and other cachochymic habits, ever adminiſtered.

Where the patient's ſituation will conveniently admit of reſt, (though indeed the remedies may be adminiſtered without it,*) a fomentation uſed for a few days, and the ſuppurative cataplaſm,† ſupported lightly by a flannel roller, about a week longer, never fail to leſſen the moſt troubleſome ſymptoms, and ſo far to ſubdue them, as to render this ulcer more tractable under ordinary means. That kind of dreſſing, beſides every other advantage, has that of abſorbing, and therefore, ſheathing the corroſive, and cauſtic diſcharge, increaſed by moſt other dreſſings, to the great aggravation of the ſore.

* The different intention with which a common bread and milk poultice, and that now recommended, is made uſe of, is ſuch, that although the former is ſeldom of much ſervice, unleſs it be preſerved warm, by the patient being confined to his bed, the latter, from its potential warmth, will anſwer tolerably well when lightly ſupported by a flannel roller, though the patient be ſuffered to walk; which he may do, not only about the houſe, but to the ſurgeon's to be dreſſed, or examined, as I have repeatedly proved.

† See page 137.

When the callous edges become ſoft, their inequalities are removed, and a fine ſkin begins to cover them, the poultice may be diſcontinued, and the ulcer be dreſſed with ſome mild ſuppurative ointment, with the occaſional addition of a little ſaturnine cerate, which is peculiarly friendly to this irritable ſore, or ſometimes, the cerate made with crocus martis; but more frequently, the beſt application, in this ſtate, is *Goulard*'s cerate and bole juſt now mentioned.* By theſe means the ulcer will become manageable, and will ſoon bear more effectual remedies. This period may be known, both by the appearance of the ſore, and by, now and then, mixing a little red precipitate with the digeſtive, or by dreſſing with the unguent. hydrarg. nitrat. If the ulcer will bear theſe, a very few days will produce a wonderful change, healthy granulations will ſhoot, the remaining calloſities will diſappear, (which may be haſtened by repeated ſcarifications) the hollow parts will fill

* Beſides experience, ſuch ointments have the ſanction of all the old writers from the time of *Galen*, who conſtantly adviſe ſome preparation of lead with the abſorbent earths, or other powder, for this malignant and eating ulcer.

up,

up, and, probably, no further difficulties will ariſe. And here, I muſt return to the caution, *feſtina lente*, which can ſcarcely be too often repeated with regard to ulcers on the lower extremities. But whenever gentle eſcharotics, and powerful digeſtives are found to diſagree, recourſe muſt be had to lenients, either ſuch as are above-mentioned, or at times more ſuppurative ones, according to the particular appearance of the ſore; now and then interpoſing a dreſſing with a little precipitate, or ſprinkling the ſore with lapis calamin. and myrrhe, whenever the cure ſeems to be at a ſtand.

By theſe means I have ſucceeded in very troubleſome ulcers of this ſpecies, though perfectly intractable at firſt with every common digeſtive, and abhorrent from ordinary deterſives; and I believe they will generally ſucceed very well if the ulcer is ſmall: but if it be very large, it will not always be healed by them, without reſt, the bad conſequences of which have been often adverted to. Mr. FREKE, indeed, in regard to theſe caſes, has ſpoken very poſitively of the effects of his ſuppurative poultice, but it will certainly prove inſufficient when there are large fungi, or of very long ſtanding. The diſeaſe often

runs too deep, with too hard a callus, to allow the parts to get unloaded, and however ſuppurative the poultice, it is not active enough to anſwer the end. The hardened parts, however, muſt be removed; and it may be proper in this place, to hint at a method of treating them that is often preferable, becauſe much leſs ſevere, than the cautery, or total exciſion with the knife. It is true, a fungus but rarely occurs, ſo as to prove troubleſome, under the plan I have mentioned, and which both the bandage and exerciſe have a uniform tendency to prevent; yet it ſometimes happens that a large and hard fungus is formed ready to our hand, and is generally the conſequence of a bad bottom to the ſore. If this ariſes from a narrow neck, it may often be removed by preſſing ſome fine lint pretty firmly round its baſe; or if this fail, a tight ligature may be eaſily paſſed round it. But if the baſis be large, and it ſhould not ſeem diſpoſed to yield to digeſtives and bandage (which the ſofter fungus generally will, as the bottom of the ſore is leſs frequently unſound,) it will be ſufficient, in moſt caſes, to make one deep inciſion to its bottom, after which its ſides will frequently waſte away by digeſtives and bandage: but ſhould this prove inſufficient, eſcharotics ſhould be ſprinkled between the lips,

lips, and be occaſionally repeated, till the fungus ſhall ſubſide. This effected, proper digeſtives ſhould be continued, by which the diſcharge will be kept up, and every thing Mr. FREKE expected from his ſuppurative poultice will be happily accompliſhed, without the baneful effects of reſt of the limb; and without it, he never looked for a cure.

THE large phagedenic ulcer is the only one that will create any great difficulty to the experienced ſurgeon; ſmall ones, of whatever duration, and whatever may be the age and conſtitution of the patient, as far as I have ſeen, are healed by the above means, with eaſe, expedition and ſafety, after having withſtood a variety of others under a tedious confinement. But the very large phagedenic ulcer, which is eaſily put out of humour, and diſpoſed to ſpread on every little occaſion, is that which will prove the ſkill, and ſometimes try the patience of the ſurgeon.

However, from what I have known, I can venture to recommend a method to others; though it is confeſſed, want of opportunities has limited my experience in the worſt ſores

of

of this kind,* which falling to the ſhare only of the pooreſt people, are ſeldom ſeen but in large hoſpitals, which I have therefore occaſionally viſited, purpoſely to make obſervations upon ulcers on the legs, by comparing ſome of the worſt caſes with thoſe I have been concerned for. The poverty, and evil cuſtom of theſe patients, indeed, greatly aggravate the complaint, and though the plan recommended be ever ſo well adapted to the diſeaſe, want of compliance on their part may render it abortive; and it is poſſible, there may be

* In one of the *Medical Journals*, anno 1785, we have a particular account, by *Leonard Gilleſpie*, of the wonderful efficacy of lemon-juice, as a dreſſing for the ſcorbutic, or putrid ulcer amongſt ſea-men; and the public has been favoured with a like account by *Dr. Blane*, in his treatiſe on their diſeaſes. How far this application may be ſerviceable in what is termed, at land, the putrid, or phagedenic ulcer, I have had no ſufficient opportunity of experiencing ſince I have been acquainted with thoſe publications. However, from the good which I conceive has been effected from a mixture of lemon-juice and treacle, it appears probable, that lemon-juice alone might be very uſeful in ſuch ſpreading ulcers, particularly from its tonic qualities; a circumſtance of great importance, as will preſently be noticed. At any rate, however, deſirous as I am of throwing every poſſible light on the treatment of ulcers on the lower extremities, I thought it proper to communicate this practice to ſuch readers as may not have ſeen the uſeful publications that firſt recommended it.

ſome caſes that will yield to no treatment whatever.

If very active applications are uſed, in the form of an ointment, theſe are often moſt advantageouſly applied to the large, and irritable ſore, upon a thin piece of ſponge; by which means very deterſive ointments will agree very well for the ſhort time they are neceſſary, when they would otherwiſe eat the ulcer into holes, and give it a raw, dry, and indigeſted appearance. I received this hint, from what FREKE ſays on his poultice, that it abſorbs the acrid diſcharge, whilſt it conveys to the ſurface of the ulcer a ſuitable application. This led me to reconſider the very frequent uſe the ancients made of ſponge, which is one of the many valuable remedies of antiquity, that the moderns have indiſcriminately diſcarded; though it is in many caſes, one of the fitteſt means of conveying appoſite dreſſings to a ſore, that was ever deviſed. It is liable to no poſſible objection that I know of, in point of utility, if not made uſe of too long, and which every ſurgeon will know how to avoid.

There is, however, a very bad phagedenic ulcer, and always a large one, that diſlikes almoſt

almoſt every thing in an unctuous form, at leaſt will not be healed by ſuch applications, till brought into a different ſtate; that is, till its ſurface is braced.—There is here, I apprehend, no virulent humour, as is uſually ſuſpected, no virus that wants to be diſcharged at the ſore, nor an *irritans aliquid* which nature cannot otherwiſe get rid of. Facts demonſtrate the contrary, for not only do patients enjoy very good health, after getting rid of the ulcer and their limb together, by undergoing a painful operation; but the cure of ſome of the worſt of them, proves ſuch ideas to be rather apologies for the want of ſucceſs, than founded in the reaſon of things. Sores have been, and are healed by empirics, under all circumſtances, and no ſuch dreadful evils have enſued; but we have not known their art, and have contented ourſelves with ſuppoſing it to be unſafe, and diſputing the propriety of a cure we have not been able to effect!—*Hic labor, hoc opus eſt!*

This I would ſtir up my brethren to attempt, and am perſuaded they may ſucceed oftener than it is imagined; and perhaps the moſt rational means is to remove the local affection, a relaxed, and therefore irritable ſtate of the parts. That this has been frequently

quently the great obſtacle to their cure, it were eaſy to prove by a variety of obſervations taken from healing ſores, and from ſuch as having promiſed well for a while, and then looking pale for a few days, have run into a gangrene; or at leaſt have continued at a ſtand—but I am ſatisfied, every experienced ſurgeon is before hand with me, and is inclined, at leaſt, to ſuppoſe it probable, that the hint may be juſt.

It is not deſigned, however, to dry up ulcers on the legs, as one would a ſcratch on the finger; the veſſels of the part are firſt to be freed, and the ulcer properly digeſted, and deterged; eſcharotics are to be applied if found neceſſary, and the ſore to be treated as directed in the former part of this work, as long as nature is diſpoſed to be active; but the moment ſhe flags, or cannot be rouzed to a ſalutary exertion, by ſtimulating applications and exerciſe, (or whenever ſuch applications offend,) the inference is as obvious, as an attention to it never fails to be uſeful. The ſore is to be *braced*, and the parts diſpoſed to contract; the certain conſequence of which will be a freſh, and healthy appearance of the ulcer; a pretty ſure ſign we have not miſ-

taken

taken the caſe, and that the means we are uſing cannot be wrong.

But if this be attempted too ſoon, the plan is perfectly irrational, and the cure will not be accompliſhed, or cannot be expected to continue. For this reaſon I have objected to the early uſe of thoſe drying applications, which ſome empirics have entirely depended on, as well as againſt dreſſing ulcers with aq. litharg. acet. c. dry lint, and covering the ſurface with lead; which I may venture to ſay, would, at leaſt, be uſed with more ſafety and ſucceſs at a later period, when ſores are well cleanſed, and nature flags under fruitleſs efforts to cover a large ſurface ſhe cannot firſt ſufficiently *contract*. And here, I cannot but remark, that there are but very few parts of the body, on which we meet with ſores ſo large as thoſe on the legs, where the whole ſurface is to be covered with entire new ſkin. Surgeons are always careful to preſerve a great deal of ſkin when they take off any of the larger limbs, or a tumour of any conſiderable ſize; by this means, although the ulcer, a few days after the operation, may have been very extenſive, the cicatrice at laſt is often not larger than a half crown-piece, or even a ſhilling:

ſhilling: and it is on this account, that large ſurfaces are ſometimes ſo readily healed. But there is frequently great difficulty in thoroughly cloſing a ſore occaſioned by a burn, on any part of the body, when the true ſkin and adipoſe membrane have been deſtroyed to a conſiderable extent.* Such caſes, in this reſpect, approach the neareſt to the ulcers in queſtion, of which the old ſkin can be brought over only a ſmall part of the ſurface, and the reſt is covered entirely by new. In all ſuch caſes, the aſtringent lotion already hinted at will wonderfully aſſiſt the cure, by enabling nature to contract the ſurface, and leſſen the dimenſions of the ſore.

But however, and whenever bracing applications are uſed to the legs, they ſhould not be continued throughout the cure, nor longer than is abſolutely neceſſary; but being gradually weakened, the laſt ſtage ſhould be effected, if poſſible, by ordinary means, and

* In ſuch inſtances, though a patient be ever ſo healthy, we are apt to ſay, that the conſtitution long accuſtomed to the diſcharge, is thereby indiſpoſed to ſuffer the ulcer to cloſe. But it is very probable, it may often be better accounted for, on the principle juſt now mentioned.

with

with the cautions laid down in the foregoing pages.

The ſolution may frequently be made uſe of merely to waſh the ſurface of the ſore, or ſometimes may be applied on a piece of double linen, (for lint ſticks too cloſe to the ſurface) its edges, (in very bad caſes) being firſt ſpread with any mild cerate, to prevent them from adhering too tightly to the ſkin, and thereby confining the diſcharge; and ſhould therefore be ſomewhat larger than the ulcer. There are, however, ſome very large ſores that require a more effectual method, and the ſolution is more advantageouſly applied, for a ſhort time, on a thin piece of ſponge; but as the ſore contracts, and becomes drier, the granulations are apt to ſhoot into it, and the ſurface will bleed on taking it off. A ſlice of new bread may then be ſubſtituted, a little time longer, in its ſtead, which will equally abſorb the acrid diſcharge; but this will be neceſſary only when the ſore is yet very large, and has been much diſpoſed to ſpread, or very unwilling to heal. And ſhould we, now and then, meet with a caſe, wherein the application of the ſolution upon bread, may ſeem neceſſary for many days together, as this may be thought an uncommon, and awkward manner

ner of applying a dreſſing, the vitriol, which forms the baſis of the ſolution, may be mixed up with a proper quantity of oil, and made into a mild cerate, or ointment; with ingredients more or leſs ſuppurative, or otherwiſe, according to the particular circumſtances of the caſe. But above all theſe, bathing the limb for a quarter of an hour before each dreſſing, in a tepid ſolution of the calcined vitriol * ſhould be made trial of; an expedient I was not acquainted with when the firſt edition appeared. But if none of theſe difficulties appear upon leaving off the dreſſing with ſponge, a piece of linen wetted in the ſolution, may be laid on the ſore; or even waſhing it with the ſolution may now be ſufficient, and a mild digeſtive, or in very obſtinate caſes, the cerate with crocus martis, or *Goulard*'s pomatum and bole, be applied to its ſurface. To this, a little precipitate, or hydrarg. muriatus, may ſometimes be added to advantage, if an ulcer has hitherto been in a very irritable ſtate, and it is apprehended may not have been perfectly digeſted.

Some of theſe phagedenic ulcers with a very large ſurface, and of very long ſtanding,

* See page 181.

are of a naſty greeniſh hue, exceedingly foul and indigeſted, and ſo painful that they cannot endure the tedious proceſs of ordinary deterſives, but as hath been obſerved, are exceedingly aggravated by them: they will ſometimes, indeed, be benefited by the application of the theriaca venet. but are very apt to prove foul again. They may be cleanſed, however, in one or two dreſſings, by ſome ſuch lotion as the aqua phagedænica, for the lotion that paſſes under that name, is too ſtrong to be ſafely applied with freedom to very large ſurfaces.* Or, if ointments containing mercury are thought proper, the ung. hydrarg. nitr. is one of the moſt powerful, or an ounce of ung. reſinæ flavæ with a ſcruple of the hydrargyrus muriatus, will form an excellent deterſive. But it ſometimes proves a very painful application, and ought never to extend beyond the ſore, as it may bliſter the part all around, and bring on an eryſipelatous inflammation.

The lotion I juſt now hinted at, is, indeed, generally preferable; this I have called a de-

* It is likewiſe a very inartificial preparation, formed upon erroneous principles, by which the intention is very much fruſtrated.

terſive

terſive lotion, to diſtinguiſh it from that I formerly mentioned, and conſiſts of a mild ſolution of the ſal martis, with a very ſmall portion of hydrargyrus muriatus; a thick piece of crumb of new bread well ſoaked in this ſolution, and bound on the ſore at going to bed, will often cleanſe it in one night, and produce a diſcharge of as laudable pus as the ſurgeon can wiſh for; nor will frequent repetitions be neceſſary. It will then be ſufficient in general, to waſh the ulcer with it before the ordinary dreſſings are applied. But ſhould the ulcer ſpread again after a while, though it has been perfectly digeſted, and looked as well for a time, as a common ſore on the arm, recourſe muſt be had to the firſt mentioned lotion. The looſe flabby ſurface muſt be braced, and contracted, (and this is fitly done by aſtringents, which invigorate and warm without relaxing), which every ſurgeon knows always produces a freſh and pleaſant appearance, lightly granulated, but without a diſpoſition to bleed upon every touch of an armed probe; which by the bye, is ſometimes uſed more freely in wiping the ſurface of ſores than is ſafe, and generally much more than is neceſſary.

This lotion is very ſimple, yet is exceedingly deterſive, and by means of its bracing powers, gently corrugates the ſurface, and by kindly urging nature to action, gives the ſore a florid and ſtrawberry appearance, but without leaving that dryneſs upon it, which common aſtringents, and particularly alum, always induce. And it may be neceſſary here to obſerve, that though applications merely aſtringent or drying, are in general very improper, for reaſons that have been repeatedly hinted at, experience proves there are ſome things of the aſtringent kind, which are likewiſe deterſive, that may frequently be uſed with advantage and ſafety. It was not, however, without long attention to the ſubject, and numberleſs attempts, that a ſafe and ſuitable preparation has been diſcovered; ſuch an one, as will not only brace, but cleanſe the ſore, and preſerve a pleaſant appearance of its ſurface, whilſt it diſpoſes it to heal; ſuch an one, as according to the ſtrength it is made of, will abate, or preſerve the diſcharge, will ſtimulate the riſing granulations, and urge nature to exert herſelf, or will more powerfully corrugate its extreme veſſels, and diſpoſing them to contract, prepare them to cicatrize at the edges of the ſore.

Such,

Such, it is thought, is the ſolution frequently hinted at, and that it will often anſwer all the purpoſes required in many obſtinate ulcers. It may ſafely be uſed to every very large one, and in perfect conſiſtence with the plan of not compelling them to dry up, if it be not uſed too early, nor continued too long; and which the prudence, and experience of the ſurgeon will determine. This is made of the vitr. virid. ad albitudinem calcinatum, diſſolved in aq. font. and prepared of ſuch a ſtrength, according to the nature and extent of the ſore, as the practitioner ſhall think fit.* But it ſhould be only in the hands of ſurgeons, who will vary its aſtringent quality and ſtrength, to the circumſtances of the caſe, and will not attempt to dry up old ulcers in the mode of empirics; ſome of whom are not unacquainted with it: for if made of an improper ſtrength, it becomes a very different application, and will alone induce a ſkin on the ſurface of many ulcers that are yet in a very undigeſted ſtate, and unfit to be healed—but fitneſs and ſafety are not always

* A piece the ſize of a *French walnut* diſſolved in a quart of water, will be of a moderate ſtrength.

the objects of that claſs of practitioners, and to whom therefore a little knowledge is a very dangerous thing.

Some exceptions will offer to this general plan of cure; and firſt, in regard to a *change* of the dreſſings; which in obſtinate caſes, and eſpecially in large, old ulcers, is oftentimes neceſſary whenever they ceaſe to heal, or to look well. Such a change is alſo peculiarly proper in regard to ſtimulating applications; which it is not only neceſſary ſhould be made ſtronger, from time to time, as the ulcer is found to bear them, but it is often neceſſary to vary the *kind* of ſtimulas, according to the nature of the ulcer, and varying appearance of its ſurface. Another exception to the general plan, will relate alſo chiefly to very large, and old ulcers, and as far as I have known, only in very old ſubjects. In ſuch caſes, when an ulcer has been very conſiderably diminiſhed in ſize, and ſometimes when juſt on the point of healing, it will continue for days, and ſometimes for weeks at a ſtand, but without looking ill. It is preſumed, therefore, that the bottom is ſound, but the powers of nature fail as well as the means above mentioned. In a few ſuch caſes, if ſprinkling the ulcer with

with fine powder of myrrhe, bark, rhubarb, or ipecacuanha, ſhall not have an immediate good effect, merely drying applications, ſuch as finely pounded prepared chalk, or lime, have in a few inſtances been had recourſe to, and have healed up the ulcer with ſafety.

I ſubjoin only a few other means that have at times had a good effect, when the general remedies have ſeemed to fail, or the ulcer kept long at a ſtand. Such are a poultice made of young ſtinging nettles; alſo the following:

℞. Pulv. ſemin. lini,
Sacchari rubri āā ʒiij
Pulv. Zingiberis, ʒj
Aquæ puræ Q. S. pro cataplas. quatuor.

But for many irritable ſores, which when nearly healed up, have repeatedly ſpread again; become very foul, and ſecreted a copious, thin, and fœtid diſcharge; the unguent. hydrargyri nitrati mixed with an equal quantity of cerat. ſperm. ceti, or other ſoft ointment, is often found an immediate remedy.

The common fermenting poultice, made of yeaſt and flour, is likewiſe ſometimes very uſeful, and has cured a very old ulcer of the

eryſipelatous kind, after various applications had failed.*

THUS far ſome experience may be ſaid to have gone, but how much further this plan may with ſafety and advantage be extended, it is time only can prove. It has been obſerved, however, that my experience of its advantages over every other method hitherto made public, has been greatly confirmed ſince the former editions of this work; and I have therefore further ground for hoping that the treatment laid down in theſe pages, may be applied to ulcers attended with caries of the bone. At leaſt, when the ulcer is only of a moderate ſize, and the injury has not penetrated ſo deeply, or the pain and inflammation are ſo great, as to render a very long

* The following is recommended for painful and foul ulcers, by Mr. *Hammie Jun.* aſſiſtant ſurgeon to the royal hoſpital at *Plymouth*, and publiſhed in *Duncan's Annals of Medicine*, 1798.

An handful of hops boiled in a quart of water, to a ſtrong decoction, and made into the proper conſiſtence of a poultice by the addition of oat-meal, with lard, or oil. After waſhing the ſore with the decoction, the poultice is to be applied bare to the ulcer.

con-

confinement abſolutely neceſſary, the methods propoſed ſeem to promiſe ſucceſs; though my own experience may not warrant me to promiſe it where the caries is conſiderable. And allowing only a certain time of confinement at a neceſſary period, when the bone is exfoliating, (which may be haſtened by ſlight perforations into the ſound part) exerciſe will have a very conſiderable advantage through the reſt of the cure; for as a degree of inflammation is the proceſs, by which nature throws off ſphacelated portions of bone, it being perfectly ſimilar to that which takes place in the ſofter parts of the body, I may venture to think this proceſs may go on better, and if it ſucceed, far more ſafely, with moderate exerciſe than by abſolute reſt, as the cure is likely to be more laſting. We know how much can be done, even in the foul air of an hoſpital, under the hands of experienced practitioners, in ſome very bad caſes; though this is certainly ſometimes prevented by the cloſeneſs of the place, or the patient accidentally taking a fever.* If theſe riſks could be avoided by

* Beſides theſe diſadvantages, there is another very common in hoſpitals; which is the cuſtom of taking off the dreſſings from ſore legs, ſometimes an hour or more before they are

by the patient being, with ſafety, permitted to take as much exerciſe a part of the day, as might maintain him during his cure, perhaps now and then a limb, or a life might be ſaved; or, at leaſt, the attempt, it is hoped, might be juſtified.

But after all that can be ſaid, the neceſſity of amputation, in ſome caſes, cannot be diſputed; but I am fully perſuaded, there is good reaſon to hope ſuch will not often occur, after this method ſhall have been for ſome time adopted. For patients will then have been informed, that ſore legs are cured without confinement from their families or labour, and that ſo cured, they will not be afterwards liable to return, but from the ſame cauſes that produced them at firſt. Theſe conſiderations will, probably, encourage moſt patients to ſeek advice very ſoon, and though ſome of the poorer amongſt them ſhould procraſtinate longer, many of theſe may, nevertheleſs, get effectual help when they apply; which will be likely, at leaſt, to

are dreſſed up again. The bad effects of this practice muſt be evident to every man, but will be more ſo, by compariſon, upon leaving it off.

prevent

prevent the diſmal effects of a mere temporary cure.

BESIDE the few caſes which, but for amputation, are beyond the reach of art, others have been mentioned, which manifeſting the exiſtence of internal diſeaſes, with morbid affection of ſome of the viſcera, where it has always been preſumed an external drain muſt prove ſerviceable, it may become a matter of doubt, whether their cure may be ſafely attempted,* or the ſubſtitution of iſſues be a ſuf-

* Ulcers attending the leg in old people, ought to be looked upon as critical, and therefore ſhould not be healed. LE DRAN: ſo HEISTER, and many other eminent writers.—The opinion of AVICENNA is ſo very emphatical, I hope I ſhall be excuſed if I give the quotation. "Sed in ſenioribus non ſanantur eorum ulcera—et quandoque ſanantur, deinde reſcinduntur, quoniam non generatur in eis caro, niſi ante mundificationem; quando ergo retinetur in eis ſuperfluitas non munda, oportet inde ut corrumpatur continuitas proveniens ſecunda." *De Ulcerib. Lib. iv.*—I have ventured, however, to cure ulcers of many years ſtanding in very old people, and one many years ago in a lady upwards of eighty years of age, whom a very eminent ſurgeon had cautioned againſt ſuffering it to be healed; all of whom have ſince enjoyed good health, and the ulcers have ſhewn no diſpoſition to break out again. This practice has alſo the ſupport of *Mr. Bell*, who though ſo great an advocate for iſſues, conſiders ſore legs, except in caſes of ſpecific infection, merely as local affections.

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ficient ſupply in their ſtead. Here the phyſician ought to be conſulted, and, indeed, it were to be wiſhed this were much oftener done in ſurgical caſes, than it is; he would furniſh the ſurgeon with ſome uſeful hints on various occaſions, and whilſt they would proceed pari paſſu together, the patient would not have to repent it in the end.—But in the preſent inſtance, ſhould they be of opinion that the diſcharge from a large iſſue would be inadequate * to the drain from the ulcer, they may perhaps be in the right, and the patient will probably chuſe to err on the ſafe ſide. There are certainly facts which favour either ſide of the argument, and therefore ſome latitude muſt be allowed, and the diſcretion of practitioners muſt determine in particular caſes. WISEMAN, for inſtance, gives us a remarkable one *(Book ii. chap. 9.)* of a young woman afflicted with a bad ulcer on

* See BELL, *On Ulcers, Part ii.* § 2. on the nature and quantity of pus diſcharged from a common iſſue—Add to this, the very moderate diſcharge many ulcers furniſh when left to themſelves, or dreſſed as they uſually are by paupers, with a little very bad cerat. epulot. But reaſoning from facts, it appears full as probable, that the advantages of natural, or artificial drains ariſe more from irritation, than the diſcharge from the ſore. *See Introduction, pages* 40, 41.

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her leg, which for a long time reſiſted all the means uſed by himſelf and others, on account of ſuppreſſed catamenia, which periodically occaſioned a foulneſs of the ulcer; till at length the ſore being healed by the aſſiſtance of a laced-ſtocking,* the woman enjoyed perfect health, and the menſes ſoon afterwards returned in their natural courſe. Suffice it to ſay, that great numbers have been cured where the bad conſequences apprehended have not enſued, and as far as I could learn, very few have ever broken out again.

SOME Caution however is neceſſary, but it conſiſts, in very few things, viz. *Purging*, *Temperance*, and continuing the *Bandage* for ſome time.

* That this, and many of WISEMAN's beſt cures were effected by a tight bandage, and often by a free uſe of precipitate, is exceedingly apparent.—Speaking of ulcers with great loſs of ſubſtance, which he dreſſed with baſilicon mixed with precipitate, (which he there obſerves he uſually carried in his ſalvatory) he expreſſes himſelf thus.—"I then rolled "it up with expulſive bandage, the cure, indeed, conſiſting "mainly in the well-rolling—by the uſe of it, both the in-"flux was taken off, and the member ſtrengthened." And again *chap. viii.* on the ulcer with callous lips, he ſays "the "ſpeedy cure of this I imputed to the laced-ſtocking, it "performing all the intentions neceſſary to the curing of "many ſuch like ulcers."

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THOUGH purging has been ſo ſtrictly forbidden, with a view to invite the ulcer to heal; during which proceſs, to prevent conſtipation is all that, in general, ſhould be aimed at; yet when the cure is nearly accompliſhed, ſuch a courſe is ſuggeſted with the greateſt propriety. A few briſk purges, at convenient intervals, ſhould at this time be directed, according to the age and ſtrength of the patient. The roller, it was ſaid, ſhould be continued for ſome time; the ſize and duration of the ulcer, with ſimilar circumſtances, which every ſurgeon will have reſpect to, will determine the length of this period; for if the ulcer has been very large, and of long ſtanding, it will be neceſſary to continue the roller a conſiderable time. It need, however, be worn only for a few weeks during the night.

This is all that is required; adviſing, however, that caution proper for every convaleſcent, to attend to his general health, and to take a purge now and then, if a conſtipated ſtate of the bowels ſhould require it. To theſe, indeed, was added a caution to the intemperate, ſince, doubtleſs, a certain manner of living, may render this, and the cure of any other

other complaint, of very uncertain duration. If men will run *quo ducit gula*, they muſt themſelves, and not the phyſician or ſurgeon, who has once or more cured them, abide by the conſequences.

BY way of Concluſion, it may not be amiſs to hint again at the principal intentions of this work, as well as make ſome apology for ſo bold an attempt to ſet aſide the common remedies and applications for ulcers on the legs, and even to recommend a method, in many reſpects diametrically oppoſite to thoſe in vogue; as Exerciſe inſtead of Reſt and Confinement; free generous Diet * inſtead of a ſtrict ſparing Regimen; and ſtrong Digeſtive Ointments rather than mild Poultices and cooling Cerates.

If the ſucceſs of a plan varying in ſuch eſſential reſpects from any hitherto received, ſhould juſtify the hope entertained, the advantages will not be inconſiderable to men of pleaſure or of buſineſs, but eſpecially to the ſuffering poor, who croud the public hoſpi-

* See Dr. KIRKLAND on the *diet* of patients, in his *Thoughts upon Amputation.*

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tals much more on account of theſe diſorders than any others. If they can be cured without being obliged to leave their families, and that labour by which their families are ſupported, it is thought one grand obſtacle to their applying for relief in proper time will be removed: and the ſurgeon will, doubtleſs, be glad, on many accounts, to be ſaved the very diſagreeable neceſſity of receiving ſuch objects into the hoſpital, moſt of whom may with more ſafety and propriety, be cured out of the houſe. But important and deſirable as is ſuch a deſign, the author is aware of the obſtacles there may be to the extenſive uſefulneſs he has had in view, in rendering ſuch a plan general amongſt the very pooreſt and heedleſs part of mankind, who are ſeldom faithful to themſelves. Satisfied, however, of many advantages it will have amongſt thoſe of ſuperior rank, and wherever patients can be depended on, he is confident ſome good will be effected upon this plan, that has never been accompliſhed by any other. He only requeſts his brethren will condeſcend to make uſe of the preceding hints, and allow a little time to prove the utility of the mode, and he doubts not they will find ſucceſs enough to encourage them to perſevere, until further improvements will be made by them.

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He has, however, diſcharged his part; he has delivered his ſentiments as the reſult of long attention to the ſubject, and muſt leave his readers to paſs what ſentence they pleaſe. In the mean time, it is his ſatisfaction to have aimed at things, which it can be no crime to have attempted though his deſign ſhould not perfectly ſucceed; whilſt to have concealed what was judged likely to be of ſuch public utility, would have been criminal in the eye of every benevolent mind.

It may be proper to add, that it has not been his deſign to intimate that other ſurgeons are without their ſucceſs in theſe caſes, ſome of whom he knows have paid particular attention to them; and ſhould any know already as much as he has to ſay, and be able to heal old ulcers without confinement, or probability of their return, it is pity the public has not been made acquainted with it. It would have ſaved the compiler of theſe ſheets ſome trouble; who had no ſuch deſire of appearing in public, as needleſsly to have expoſed himſelf to the hazard of cenſure, for opinions he has ſuppoſed novel among regular practitioners. To ſuch he now ſubmits the foregoing pages, perſuaded they contain ſome

improvements. But ſhould they, after a longer trial, be found inadequate to the end, and any other method be pointed out more rational, eaſy, and certain, it will be the duty of every candid practitioner to adopt it. Till then, the author can only ſay,

Vive: vale. Si quid noviſti rectius iſtis,
Candidus imperti: ſi non, his utere mecum.

HOR. Epiſt. VI. L. i.

BRIEF

BRIEF

PRACTICAL OBSERVATIONS

ON SOME

SCROPHULOUS ULCERS;

OPHTHALMY;

THE

MAMMARY ABSCESS,

AND

GANGRENE.

INEST SUA GRATIA PARVIS.

PRACTICAL OBSERVATIONS

UPON SOME

Scrophulous Ulcers.

WHEN I began to reflect on the great advantages that had reſulted, in many bad ulcers of the legs, from a bold uſe of the hydrargyrus nitr. ruber, and of ſome digeſtive ointments of a warmer compoſition than thoſe in common uſe; as well as from a generous diet and exerciſe, it was natural enough to extend the trial of them in other troubleſome ſores. The reſult of theſe experiments has, indeed, exceeded my expectations, and I can now venture to recommend them to the trial of other practitioners, and, particularly, for cold glandular tumours about the neck, ſuppoſed generally to be of the ſcrophulous kind;

which, however, frequently appear, and break into very troubleſome ſores, without any other marks of that dreadful complaint.

I was further encouraged in theſe attempts, by ſome obſervations of the late Mr. FREKE; who, indeed, was a man of a lively and warm imagination, and ſometimes a little eccentric, but was, nevertheleſs, a thinking man, and had plauſible reaſons to aſſign for every part of his practice. His ideas of theſe caſes, (as well as of diſeaſed bones) ſerved to confirm me in the opinion I had entertained both of the diſeaſe and the remedy.

I have now, for ſome time, uſed the precipitate with great freedom in ſcrophulous affections of the neck, and to very great advantage.—If the ſwellings are at all diſpoſed to come forward, but are not broken, or have only a ſmall orifice, I always haſten the maturation, and the diſſolution of the ſkin as far as it is diſeaſed, by means of epithems made of honey, flour, and yolk of egg, to which alſo may be added a little yeaſt. I am very little concerned to what extent the ſore may run, as I know I ſhall have much diſtempered gland to deſtroy underneath, and that if the latter be not effectually done, the

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ſore will either not heal entirely, however ſmall it may become, or will ſoon break out again. The ſcars, however, are even ſmaller, than when the ulcers are treated in the ordinary way. For the ſkin, in this part, being thin, frequently looſe, and yielding; the tumour beneath it removed, and the ſores healing up much ſooner than under the lenient method; I have known them, when cured by the above means, leave no more than a ſeam, and a little redneſs to be obſerved afterwards, without any proper ſcar on the part.

The only diſagreeable circumſtance that can attend ſuch a practice, I apprehend, is the poſſibility of a ſalivation, of which I can ſay only, that it has never happened to me; though before I relied ſo much on external means as I now do, I have given mercurial medicines in ſmall doſes, for a conſiderable time, whilſt I have made uſe of precipitate daily with great freedom. Moreover, as it is very common to preſcribe ſea-water, or ſome other laxative, in theſe caſes, the riſk of a ſalivation, I imagine, will in general be very little. But ſhould even ſymptoms of it appear, every practitioner, as he will know the cauſe of it, will immediately take care not to increaſe it.

I am now, however, perſuaded, there will generally be little or no occaſion, for adminiſtering mercurials inwardly, or any other medicine under the idea of an alterative, (at leaſt, I am afraid, we know of none peculiarly adapted to the diſeaſe) much leſs for frequent purges, which ſerve only to reduce the vis vitæ, which, in theſe caſes, is always too languid already. I find likewiſe, that the ſores heal up as kindly without, as where mercurials, antimonials, cicuta, neutral ſalts, or ſea-water are made uſe of, all of which I have formerly preſcribed with great freedom; and I doubt not that the plan I mean to recommend, eſpecially when this diſeaſe is confined to the neck, will be very frequently ſucceſsful in the hands of every other gentleman, who may give a fair trial to it.

If the patient is unhealthy in other reſpects, ſuch medicines ſhould be directed as appear ſuitable to his complaints, when the bark will, I believe, be frequently found as uſeful as any; and I have found evident good effects from a ſtrong decoction of the woods, and crude antimony. But in a general way, I depend upon nothing ſo much as procuring a good and early maturation of the tumours, and ſuppuration of

of the diſtempered ſkin and glands, by means of the aforementioned epithem; a very bold and continued uſe of the precipitate; a nouriſhing diet, and as much exerciſe as the patient can well bear; eſteeming walking the beſt of all. To this end, the patient ſhould be encouraged to be continually on his feet, and abroad in the air as often as the weather will ſafely admit of it; and of whatever age he be, after beginning this exerciſe in a way that ſhall be quite agreeable, to increaſe it daily, till he ſhall go to bed every night thoroughly fatigued. Of the advantage of this,* I have had ſuch proofs, as leave me no room to doubt of the propriety of venturing to recommend it, as far as ſuch experience may be ſuppoſed capable of doing it. And of this I recollect two remarkable inſtances;

* Nihil eſt, quòd utiliſſimam ſuperflui et nocentis humidi perſpirationem tam egregiè juvet, quam motus corporiſque exercitatio, qua tuendæ ſanitatis vix præſentius datur auxilium.—Peregrinatio ad omnium ſalubritatem pertinet, quia non modo cum continuo motu, ſed frequentiori etiam aeris inſalubris in ſalubriorem mutatione conjuncta eſt, quæ tuendæ ſanitati et corpori a pluribus morbis præſervando egregiè velificatur.

HOFFMAN. *De Motu optimo Sanitatis Præſidio. Cap. ix. et ſeq.*

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the one in a lad who came to *London* exceedingly ſcrophulous, and was hired to go behind the carriage of a gentleman, who was in it many hours every day: the other was the ſon of an exciſeman; who having very long walks, took the child, who was about ſix years old, conſtantly with him. Neither of theſe patients took any other medicine than a dram or two of *Epſom* ſalts, four or five times a week; yet both got perfectly well.

To obtain the advantages that have been hinted from the uſe of the precipitate, ſcrophulous ulcers ſhould be filled with it, and if a ſlough is formed by it, (which will not always be the caſe) the ſuppurative epithem is the beſt dreſſing till the ſlough is thrown off; when the precipitate ſhould be immediately repeated. The firſt, and a very early advantage, from ſuch a uſe of it, will be a change in the diſcharge, both in quantity and quality, which from having been too little, or from an abundance of corroding ſanies, will be changed to a moderate diſcharge of good and laudable pus; and the ſore, except when a ſlough is produced by the application, will always look clean. In a little time there will alſo be a favourable change in the parts contiguous to the ulcer, the ſwelling will ſubſide, and from

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a red and heated appearance, the ſurrounding ſkin will acquire its natural colour, and the patient himſelf, or his friends, will be able to judge of the favourable turn in his caſe.

I have adviſed a daily uſe of the precipitate, which, indeed, I intend almoſt literally; for when a good deal of the gland has been deſtroyed, the ſore and ſurrounding ſkin will be found to contract under the uſe of it, as if an aſtringent application were made uſe of; and the parts will actually heal up to the breadth of a ſtraw, whilſt this active mineral, which has already deſtroyed a cluſter of diſtempered glands, is daily applied.

I have elſewhere taken notice,* that electricity has been found very ſerviceable in theſe ſores, and that it becomes ſo by communicating powers to the parts. But it will be further neceſſary to remark, that it not only forwards maturation in ſuch tumours as are previouſly diſpoſed to ſuppurate, but does it in the moſt advantageous manner, as well as ex-

* Vide the Introduction to *Treatiſe upon Ulcers*, page 18. *(Note.)*

pedites

pedites their healing, and often without ſo much as a ſcar. For tumours brought on by this means to ſuppuration, frequently break only into very ſmall apertures, from which, however, the matter runs very freely by the daily uſe of electricity; and when they are diſpoſed to heal, the ſkin on the ſurface becomes attached again to the parts below, and only perhaps half a dozen very ſmall ſpecks, in the form of ſo many pin-holes, remain.

I KNOW it is an opinion with ſome people, that ſcrophulous ſwellings ought not to be invited to ſuppuration; though not from an idea that they will heal leſs kindly in conſequence of early maturation, but ſolely from the difficulty of healing them whenever ſuppuration takes place, and the abſceſs is burſt. But ſince ſcrophulous tumours, and particularly thoſe of the neck, almoſt conſtantly end in ſuppuration, at one time or other, though not at all invited to it by art; and ſince experience has proved the very conſiderable advantage of bringing them to an early and copious maturation, which both prevents ſo much of the glands being affected, and occaſions a more perfect diſſolution of that which is already diſtempered, I can confidently adviſe the early

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uſe of the ſuppurative epithem,* in preference to every other remedy, unleſs it be convenient to make trial of ſea-bathing. It will be a means of preventing many of the ſad effects of leaving theſe tumours for months, and even years to themſelves, (as I have ſeen them) in habits of body ſo ill-calculated to get rid of diſeaſe; and wherein medicine is univerſally acknowledged to afford ſo little aſſiſtance.

But ſhould a ſcrophulous tumour in this part be unuſually large, it may be treated in a ſomewhat different manner; it ſhould, however, be ſpeedily brought to ſuppuration, by the epithem already mentioned; or ſhould this be done to our hand, as it will conſequently contain a good deal of pus, the glands will thereby be already conſiderably diſſolved. On this account, there will not only be leſs occaſion for ſo bold a uſe of the precipitate, but the extent of the tumour being conſiderable, it will be of conſequence to preſerve a good deal of the ſkin, if there be no objection to doing it. Therefore, if that is not in a

* Hence, probably, it is that the *Malvern-Waters* have ſometimes proved ſo beneficial in theſe caſes. See a note on the *Malvern-Waters*, in the *Treatiſe upon Ulcers*, page 129.

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very bad ſtate, (which it frequently, indeed, is, before large tumours ſuppurate plentifully) it will be found very convenient to open the abſceſs, by making only a puncture with a lancet, firſt at the top, and then at the bottom of the tumour, ſufficient to paſs a ſeton through it; or it may be done at once by a ſmall ſeton-needle, armed with a ſlender ſkaign of cotton or ſilk. Beſides every other advantage of this method of diſcharging the matter, which will alſo be gradual, is the excluſion of air; a point ſcarcely enough attended to in the treatment of abſceſſes. The ſeton being introduced, ſhould be drawn up and down at leaſt twice every day, and ſometimes be moiſtened with ſome proper deterſive ointment; and occaſionally ſprinkled with precipitate. The conſtant irritation of the ſeton, will tend to diſſolve the remaining hardneſs of the glands, far more than any common poultice, which frequently ſerves only to deſtroy the ſkin without affording that ſtimulus to the parts underneath, which this ſore always requires. The irritation of the ſeton will alſo diſpoſe the bottom of the abſceſs to throw up healthy granulations, the moment the hardneſs is diſſolved, and the ſore will thereby heal up kindly, more expeditiouſly, and with much leſs ſcar, than could be expected from the extent of the tumour;

tumour; no more than the marks of the punctures, and a little redneſs of the ſkin, as it was obſerved, remaining afterwards to be ſeen.

Should the punctures made by the ſeton, however, not be diſpoſed to heal in a reaſonable time, after the ſilk is withdrawn (which ſhould be gradual, by removing a few threads at a time;) and yet no freſh hardneſs take place, nor the diſcharge be increaſed, the little orifices may be eaſily dried up, by dreſſing them, twice a day, with bits of lint dipped in a mixture, conſiſting of a little new milk, and a drop or two of aq. litharg. acet. which by this means will be thickened to the conſiſtence of a liniment; and becomes a very uſeful application to many other very troubleſome ulcers, of which I firſt ſaw the good effects ſome years ago, in a very different caſe, under the direction of the late Mr. WATSON.—If the edges of the punctures become callous, a few touches with the argent. nit. will ſoon ſoften them, and diſpoſe the punctures to heal.

If I might be permitted to offer any further hints on theſe troubleſome ſores, and to judge from ſome favourable circumſtances joined to a little experience, I ſhould hope the laſt mentioned

tioned method may afford ſome conſiderable aſſiſtance in ſome ſcrophulous abſceſſes about the joints of the upper extremities, if the patient be likewiſe ſent to the ſea. As for thoſe on the lower ones, beſides every other diſadvantage they labour under, that of depriving the patient of good air and exerciſe, forbids me to expect any very material improvement upon the common method of treatment.

Since the firſt edition, I have had ſome further experience of the virtues of camphor in cold tumours, and I can now recommend it, in conſequence of ſuch trials, as frequently capable of diſperſing ſuch as have long been in a quieſcent ſtate, and not diſpoſed to ſuppuration. Such tumours have ſometimes proved exceedingly troubleſome on this account, remaining indolent after others have ſuppurated plentifully. In this ſtate, oil well ſaturated with camphor,* has become a very uſeful and

* This is likewiſe the beſt remedy, I believe, for the incipient bronchocele, which it diſperſes ſometimes in the ſpace of a few weeks, if very well rubbed into the part at leaſt three times a day, and a piece of flannel well greaſed with it, be kept conſtantly to the throat. The patient at the ſame time ought to take a drachm or two of the Sal Rupil. every morning.

ſafe

ſafe application, and by reſolving the ſmaller indolent tumours, ſerves to complete a cure, that would otherwiſe have remained imperfect, after all thoſe had been healed, which the epithem had brought to ſuppuration. Electricity likewiſe, though it forwards ſome tumours, will aſſiſt the reſolution of ſuch as are not diſpoſed to ſuppurate.

Theſe things are all I mean to propoſe for theſe ill-conditioned tumours, which I believe, indeed, will often require no other aſſiſtance. And I am perſuaded, more may be effected by them, and much ſooner, than is frequently done by the various alterative medicines, and other means that are generally preſcribed, (if none of the larger joints be affected;) unleſs in ſome inſtances, it be ſea-bathing, the great advantages of which are extremely uncertain, and to be known only by the trial of it: every practitioner having found his utmoſt expectations exceeded by it in ſome caſes, whilſt in others, his patients have returned from the ſea much worſe than they went there. At all events, the above plan may, with propriety, take place in the winter-ſeaſon, when ſea-bathing is thought by ſome practitioners to be attended with hazard, to delicate habits: or ſhould even

that be determined upon, the ſores may be treated in the above manner at the ſame time.

It is not unlikely, that ſuch a uſe of the precipitate as I have now been recommending, may be already known to other gentlemen of the profeſſion, but it is certainly not the common practice, nor has it, I believe, ever been made public;* and from what I have known myſelf, and been informed of by others, of the ſucceſs of the ordinary means, I can venture to ſay, that the cure will often be more expeditious and certain, as well as leſs unpleaſant, if the plan ſhould be generally adopted.—It is ſcarce neceſſary to add, that after the cure, or juſt before it is completed, it will often be adviſeable to open an iſſue in ſome convenient part of the body, as well as to attend carefully to the diet, and continue the exerciſe for a time.—Should the patient have been ſubject to ophthalmia, or have other mark of ſcrophula in the habit, theſe will

* Since the firſt edition, I have obſerved in the *Praxis Barbettiana*, that the uſe of eſcharotics is recommended as adapted to theſe ſores; but is mentioned only in a general way, as being ſerviceable after lenient applications have been made uſe of in vain; which is a maxim equally applicable to moſt other ſores.

be

be additional inducements for making a trial of ſea-bathing, which he ſhould not only continue through the ſeaſon, but return to it, at leaſt, the following ſummer, if it has been evidently beneficial. Should a diſpoſition to ophthalmy return, or other weakneſs of the eye take place, other remedies will be requiſite, as will be noticed in the following tract.

BRIEF HINTS

ON SOME OF THE

MORE COMMON DISEASES

OF THE

EYE.

DISORDERS

OF THE

EYE.

HAVING in the preceding obſervations had occaſion to mention the ſcrophulous ophthalmy, I ſhall in this edition drop ſome further hints on that complaint, in a few additional pages on the more common diſorders of the eyes, which may, at leaſt, ſerve to direct the young practitioner.

There is, I believe, no part of the human body whoſe diſeaſes have been more the ſubject of empyriciſm than the eye, though no part can be more important to us, nor entitled to more cautious treatment.

A principal occaſion of theſe complaints lapſing into ſuch hands, is, perhaps, the very great uncertainty in the operation of the beſt remedies, owing to the variety of conſtitutions in the ſubjects of them, as well as to the very different treatment theſe diſorders require at different periods. Hence the numerous eye-waters we hear of, (and ſo much extolled by ſurgeons as well as by empyrics;) many of which, I doubt not, have been very ſerviceable in their turns, but are all equally improper, as general remedies. This neceſſary diverſity of treatment is, however, very well known to every good practitioner, though the preciſe period for a change in the remedies is not ſo readily aſcertained.

The chief difficulty in the cure of ophthalmy, ariſes, I apprehend, from the great *irritability* of the organs of ſight, and their diſpoſition to exceſſive *relaxation*; but between theſe alſo, there is a diſtinction frequently to be made, that is of the greateſt importance, but has not, I think, been very generally obſerved. Theſe ſymptoms, indeed, ſometimes exiſt together, and are dependant on one another; but what I deſign to remark is, that in diſorders of the eyes, there is a ſpecific difference between them,

them, to which we are carefully to attend, as to an important guide in our practice. And this will be very evident to the attentive practitioner, from the conſideration of ſedative applications ſo frequently failing of ſucceſs, in apparently irritable ſtates of this organ, whilſt bracing applications will as often prove exceedingly prejudicial in caſes attended with great relaxation.* Hence it muſt happen, that either the particular affection has been miſtaken, where only one of them has exiſted, or it has not been rightly aſcertained which has been the primary affection, and the proper cauſe of the other.

Indeed, ſurgeons are well acquainted with the circumſtance of relaxation, and have well known how liable the eyes are to be ſo affected in conſequence of almoſt every conſiderable inflammation; and have therefore paid great regard to it in their treatment of common ophthalmias. On this account, they

* It is very probable, it may be on this account, that the thebaic tincture has proved ſo beneficial in a great variety of caſes, related by *Mr. Ware*, wherein neither the wine alone, nor opium diſſolved in water have had a like good effect: a circumſtance I am diſpoſed to credit, though I never thought of making the experiment.

have

have carefully avoided urging any antiphlogiſtic plan beyond a certain time, and particularly as to the uſe of very relaxing, and warmed applications; which often occaſion irreparable miſchief. I have, however, reaſon to believe, there is yet occaſion for other cautions on this head, and room for improvement. A very different obſervation may therefore be made reſpecting bracing and invigorating applications, which notwithſtanding the irritable diſpoſition of the organs of viſion, and the pain that frequently attends ſuch applications, are ſometimes moſt uſeful when rendered ſharper, and more irritating than thoſe in general uſe—*Dolor dolorem ſedat*, is a well known adage, and often as applicable to painful affections of the eyes, as to many other inſtances of ſpaſmodic affections; though the good effects of irritating applications may, perhaps, be otherwiſe accounted for. But the frequent uncertainty of our remedies, for the want of making adequate diſtinctions in regard to the length of time theſe complaints may have continued; their various cauſes; and the habit of body of the patient, has given riſe to a hundred different remedies of the ſame claſs; has puzzled young practioners, and has promoted the cauſe of empyriciſm.

As

As the intention of ſuch obſervations as can be contained in the limits I have aſſigned to myſelf, can only be general, I ſhall haſten to attempt ſome improvement of the above remarks, and to point out ſome practical directions for the treatment of theſe very common, and very diſtreſſing complaints.

AND firſt, in reſpect to the period of true inflammation, it may be remarked, that whilſt the beſt practitioners have been properly cautious of not continuing too long any antiphlogiſtic plan, they have, perhaps, ſometimes not done enough in the period devoted to it. The fact is, that in very conſiderable and recent inflammations, in athletic habits, the antiphlogiſtic plan ought to be purſued boldly in the beginning, whereby the inflammation will be more certainly overcome, and with leſs riſk of bringing on hurtful relaxation, than by gentler means, and a feebler proceſs, longer continued. To this end, both hands (if I may be allowed the expreſſion) ſhould be laid on the diſeaſe, and whatever may appear requiſite for ſubduing the inflammation, ſhould be done at once. Hence, bleeding in all the different forms; bliſters; cathartics, and nitre; (which latter ſhould be exhibited with great freedom);

freedom); ſedative collyria, (and ſometimes anodyne fomentations) become the proper remedies; as well as defending the eye from a ſtrong light: and if the pain be very conſiderable, an opiate ſhould be taken at going to reſt. Where the diſcharge is acrid and abundant, a drop or two of ſome ſoft mucilage inſtilled between the lids, is very friendly to this delicate organ; and when the inflammation has begun to give way, two or three drops of laudanum applied in the ſame manner, at going to bed, has ſometimes removed the complaint before the next morning.

When ſuch an antiphlogiſtic plan has been properly purſued for two or three days, it becomes time to think of guarding againſt relaxation, and which a much longer continuance of ſuch a plan would, in many inſtances, infallibly produce. Tonic, topical applications, and internal remedies; and among the latter, eſpecially the bark, are to be uſed, which if it be the proper time for them, will immediately produce a good effect; and if they do not, muſt not, for the preſent, be perſevered in. It is not, however, a diſtention of the veſſels of the tunica conjunctiva with red blood, that forbids a recourſe to ſuch means, or to the continuance of them; for this will happen

happen either from relaxation, or from an irritable ſtate of the part, as well as from true inflammation; between each of which, it has been ſaid, the practitioner ought to make a careful diſcrimination, and to adapt his remedies accordingly.

Indeed, the treatment of very recent inflammations of the eyes, is generally plain and obvious, and no one is at a loſs for ſuitable remedies; but in habitual affections of theſe organs, where frequent returns have induced other ſymptoms, and diſpoſed the parts to peculiar relaxation, or irritability of its veſſels and nerves, the greateſt ſkill is required to diſtinguiſh them, in order to form a rational and ſucceſsful method of cure.

This is a matter of the greateſt importance, and it has been hinted, is not always ſo eaſily done; it is a knowledge to be acquired as much from experience and great attention, as from thoſe juſt principles of art, acquired by a regular education. There is a ſomething, however, in the appearance of the eyes, which is not eaſily deſcribed, that will aſſiſt us in making this diſcrimination; and which taken in connexion with the preſent occaſion of the complaint, the frequency of its appearance, and

and the conſtitution of the patient, will lead the attentive and experienced practitioner to diſcover, whether ſimple relaxation, the mere effect of the antiphlogiſtic plan, and habit of the patient, or whether the great irritability of the organ, and perhaps of the whole ſyſtem, be the ſymptom to be particularly attended to. For in caſes attended with great nervous irritability, or where the relaxation is immediately occaſioned by it; beſides a frequent, but variable relaxation of the iris, there is often to be perceived a fulneſs, and a ſenſe of weight is felt, in the upper eye-lids, which are inclined alſo to drop, accompanied with a yellowiſh tinge of the tunica conjunctiva, that ſeldom leaves the patient entirely, and is ſuddenly recurring upon every little cold, or increaſed exertion of the organs of ſight. Beſides the indications to be obtained from an attention to the habit of body; it will be found, that the above ſymptoms will not be uſually met with in caſes of ſimple relaxation, where mere aſtringent applications prove uſeful, which in the former will always ſerve to aggravate the complaint; as will even daſhings with cold water, ſo often very ſerviceable in the other. Whether the complaint be owing to ſimple relaxation; or to mere irritability of the parts; when this is once fully aſcertained, good practitioners are

at

at no loſs for ſuitable remedies; and as I would not appear to multiply them by needleſs preſcriptions, where the ſurgeon is acquainted with varieties enough, I ſhall only ſay, that if it be mere relaxation, the aſtringent ſolution I have ſo often recommended is among the beſt in a fluid form, where a powerful bracing application is called for; and may be made of any ſtrength, as occaſion may require.†

But there is in many people an irritability of habit, of which every complaint they are ſeized with, will very powerfully partake, and more eſpecially complaints of the eyes; and when that organ has been often affected, the ſlighteſt occaſion will cauſe a return of them. Here, the practitioner will be at no loſs for a proper diagnoſtic, and I ſhall therefore only obſerve, that applications partaking both of a ſedative and invigorating nature, ſhould be immediately had recourſe to. A very powerful remedy very often in theſe caſes, is an aromatic volatile vapour,* conveyed to the eye-lids, through a ſmall inverted funnel, eſpecially at going to bed; and from which I have ſeen aſtoniſhing effects, where the patient has been for years

† See page 181.

* Two drachms of the Spir. ammon. comp. in two ounces of water, kept boiling, will anſwer this purpoſe very well.

ſubject

ſubject to diſtreſſing complaints, and in danger of loſing the ſight. Some benefit may likewiſe be obtained by daily touching the upper eye-lids and parts about with the ſpir. ammon. comp. Theſe little means have alſo been very uſeful where I have ſuſpected a diſpoſition to cataract and gutta ſerena:* in which, as well as the above-mentioned caſes, the cautious and long continued uſe of electricity, it is now well known, has alſo been very frequently ſerviceable.†

I may here add another obſervation, derived from repeated experience in what I would call a nervous ophthalmy, in regard to the uſe of collyria; which, though *a priori*, we ſhould preſume ought ever to be uſed cold, are, never-

* By the ſame means, I likewiſe once removed a very painful nervous affection of the teſtes of long ſtanding, which had rendered the parts ſo exceedingly irritable, that they could ſcarcely endure the lighteſt touch, and had rendered a married gentleman very miſerable; having withſtood many ordinary means of cure.

† For the firſt hints of the great advantages of a long continued courſe of electricity in the *gutta ſerena*, and even a perfect cure in ſeveral recent caſes, I was indebted to *Mr. Hey*, ſenior ſurgeon of the Infirmary at *Leeds*; ſome of which caſes have ſince been publiſhed in the 5th vol. of the *Medical Obſervat. and Inquiries.*

theleſs,

theleſs oftentimes inſtantly beneficial upon uſing them actually warm, eſpecially in cold weather. Of the propriety of this change, the ſenſations of the patient upon the uſe of cold collyria will frequently be a guide to us; and I have only to remark, that they ought not to be uſed warm for any length of time, in which reſpect, however, the intelligence of the patient may again ſerve to direct us.

Amongſt the means for removing great inflammation, was mentioned the defending the eye from a ſtrong light, which is, indeed, indiſpenſibly neceſſary. This ſhould, however, be rarely extended to keeping the patient's room perfectly dark, or covering the eye itſelf in ſuch a manner as to exclude all contact of light;* as ſuch covering, by heating the

* I hope it may not be deemed altogether impertinent in this place, to offer a few obvious cautions, ſcarce ſufficiently attended to by thoſe whoſe eyes are naturally weak, or ſlightly diſtempered. Such people ought to be peculiarly careful not only of not continuing any occaſional exerciſe of the eyes after it becomes painful to them, but as much as poſſible, to be always expoſed to the ſame degree or quantity of light. This attention is particularly neceſſary when engaged in reading, writing, or other employment that is likely to fatigue them: too little, or too much light being equally improper when the eyes are much exerciſed; and is, indeed,

the eye, will always add to the complaint. But in caſes of conſtitutional ophthalmias, and particularly in ſcrophulous habits, a perfectly erect poſture, throughout the day, with the head raiſed as much as may be, at night, is eſſentially neceſſary, and eminently uſeful; inſomuch that frequently, no means of cure will ſucceed unleſs this be very ſtrictly attended to. In repeated inflammations, in patients of ſuch a habit of body, I have known this alone efficacious, after many means had been preſcribed in vain by men of long experience, and where an obſtinate inflammation had been kept up for ſeveral weeks, and the patient unable to

indeed, at any time injurious. The ſudden tranſition from a dark to a very luminous aſpect, and eſpecially if often repeated through the day, has nearly produced blindneſs in ſeveral inſtances; and patients have been recovered from the danger by little more than attending to this circumſtance. For the like reaſon, reading in the duſk of the evening, and then, ſuddenly, by a ſtrong candle-light, may induce miſchief in weak and diſtempered eyes, that may not be diſcovered till too late to be remedied. I ſhall cloſe this note by obſerving, that when reading a ſmall print, without the help of glaſſes, becomes painful, ſuch reading ſhould be laid aſide; as glaſſes, in this caſe, only ſtrain the eyes, and ſhould never be taken up till a uniform neceſſity ſhall oblige, and then ſhould not afterwards be laid aſide; it being a ſhock to the optic nerves to have the like objects variouſly repreſented, perhaps a hundred times in a day.

endure

endure the leaſt glimmering of light, or to open the eye-lids without the moſt excruciating pain. And ſuch ophthalmias, indeed, very frequently need nothing more than this caution, except it be to give a laxative occaſionally, and to touch the eye-lids, now and then, with an ointment I ſhall preſently mention; and eſpecially to admit light gradually into the room, as the patient ſhall be able to bear it. In regard to medicine, nothing, I believe, does ſo much good as the bark, and ſhould this not prevent frequent relapſes, the patient, it has been ſaid, ſhould make trial of the ſea; which is more frequently uſeful in ſcrophulous ophthalmias than in any other inſtance.

Something has already been ſaid in favour of invigorating applications, which for the chronical ophthalmia, and that tedious one which ſometimes follows the meaſles and ſmall-pox, as well as in many ſcrophulous caſes, ought to be made much more active than they uſually are, and of which I have had many happy inſtances. But, indeed, many inflammations of the eyes, that are apt to return frequently and upon ſlight occaſions, are rather owing to an atony of the parts, than a true inflammatory cauſe, and will therefore always be benefited by ſuch applications. And

theſe ſhould be applied in an unctuous form rather than in a way of lotion, and will be found to be a very conſiderable improvement. Hence it is, I apprehend, that *Sir Hans Sloane*'s liniment formerly gained ſo much reputation, and has ſo often been of ſervice; its only virtues, however, conſiſting in its form and the powder it contains, which affording a ſlight ſtimulus to the parts, is rendered more permanent in the form of a liniment, than any fluid collyria can afford. Ointments againſt inflammatory affections ought not uſually, however, to contain ſuch kind of powders, which often do harm, and can furniſh no powers that cannot be otherwiſe obtained, and eſpecially by ſome preparation of mercury; which, indeed, will do more in many ophthalmias than any other kind of remedies. The due irritation and diſcharge ſuch remedies occaſion, the firſt two or three times they are made uſe of, throw the atonic parts into healthy action, and liberate the veſſels; from which I have ſeen more good effected in one or two nights, than has been done in weeks and in months by ceruſſa acetata, white vitriol, and all the other ordinary ingredients of fluid collyria.

Such

Such may be made by the addition of the unguentum hydrarg. mit. to the ceratum ſperm. ceti, or if a greater ſtimulus is required, by one or two drachms of the hydrarg. nitr. ruber, very finely levigated, to half an ounce of unguent. ceræ, and the like quantity of olive oil; or what is frequently more efficacious, a kind of unguent. hydrarg. nitr. of different ſtrengths, perpared with freſh butter, and to which camphire ſhould be added. The inſide of the eye-lids only need to be touched with one of theſe, at going to bed, and though they will ſometimes occaſion very conſiderable pain at the time of their application, and on firſt opening the eyes the next morning, they will render the parts very eaſy and pleaſant through the reſt of the day.—Indeed, had I nothing elſe to offer on diſeaſes of the eyes, than the careful diſtinction between the true inflammatory, and chronic ophthalmy, (which is ſeldom ſufficiently attended to) and the ſubſtitution of theſe liniments for fluid collyria, I conceive I ſhould deſerve well of the public. I am not ignorant, indeed, that ſuch remedies are made conſtant uſe of by ſome gentlemen of the profeſſion, who for ſometime were far from taking pains to make their virtues generally

known; which they certainly were not.—Nor ſhould gentlemen of more liberal ſentiments, at the head of the profeſſion, conclude every publication needleſs that may contain nothing new to them; nor ſuppoſe, that becauſe they make no ſecret of their knowledge, that the generality of practitioners are as wiſe as themſelves.*

A common impediment to the cure of ophthalmias, is a bad habit of body, which though an obſtacle common to other complaints, is eſpecially troubleſome in theſe. Amongſt the various remedies in common uſe on theſe occaſions, beſide iſſues, the bark, and warm pediluvia, which are very frequently

* Since this paper was drawn up, I have ſeen *Mr. Bell's* obſervations on *Ophthalmia*, the early publication of which does him great credit; but as he ſpeaks more from the practice of *Mr. Pellier* than his own, there ſeemed ſtill to be ſufficient inducement for adding my mite of experience.—It was long after the above note was added to the manuſcript, that I was informed *Mr. Ware* had written ſo fully as he has done, on theſe complaints. And had I ſeen his uſeful publication before I had prepared the preſent tract, I ſhould not have thought of writing on the ſubject. I can, however, declare, that as I have made no addition nor alteration, whatever, (except the notes inſerted at pages 217, and 236,) ſince I heard any thing of *Mr. Ware's* treatiſe; ſo did I not hope there may not be hints in the preſent that will have their uſe, I ſhould even now have ſuppreſſed it.

bene-

beneficial, I ſhall venture to ſuggeſt one, that may be given to advantage where no other remedy may be peculiarly indicated; this is, calomel joined with cicuta, a remedy not in very common uſe, but well adapted to many old and obſtinate diſeaſes of the eye.

Since the laſt edition of this work I was conſulted for a recent, but conſiderable inflammation, attended with excruciating pain. The latter was ſoon nearly removed, but the inflammation and dimneſs of ſight, yielded very little to any means. Two eminent oculiſts, were afterwards conſulted, and conceived the complaint to originate from variolous infection, the patient having been attending ſeveral children under inoculation. No means, however, proving uſeful, but the patient becoming leſs able to endure the light, ſhe went into the country; where ſhe was adviſed to apply ſix or eight leeches around each eye: in two days; the inflammation diſappeared and her ſight in a very little time became nearly as ſtrong as it ever had been.

No common complaint is oftentimes more difficult of cure than affections of the eye-lids. Theſe are ſometimes attended with a diſtention and redneſs of the veſſels of the eye,

and ſometimes not; but viſion is always impaired. In ſome inſtances, likewiſe, the edges of the eye-lids diſcharge a very acrid matter, which excoriates the cheeks; and in others, the lids are red and ulcerated, but almoſt dry.

In theſe caſes, it is well known, that a cautious uſe of the argent. nitr. will ſometimes effect an almoſt inſtantaneous cure; but I believe, it has not been often enough noticed, that a turning inwards of the eye-laſhes is ſometimes the ſole cauſe of this very obſtinate complaint: the remedy for which is ſufficiently obvious. In other inſtances of the lippitudo, the common mercurial ointment, or that with red precipitate, proves very ſerviceable, but more eſpecially, the unguent. hydr. nitrati, prepared as before-mentioned, a remedy perhaps ſcarcely to be equalled for this, and many other ſmall ulcers. I have alſo ſeen great good effected, in a few days, by a very old remedy made uſe of frequently in *St. Bartholomew's* hoſpital, and for which I am obliged to the late Mr. POTT; though my own experience, indeed, goes to a preference of the unguentum hydrargyri nitrati.

℞. Lapis Tutiæ ppt.
Calamin. āā ʒiij.
Plumb.

Plumb. uſt.
Gum. Camphor. āā ʒj.
Myrrhæ,
Sarcocoll.
Vitriol. alb. āā ʒß.
Butyri inſulſi, ℥vj.
Accuratè miſceantur.

THERE is another and ſometimes fatal inflammation, eſpecially to infants, of which there is not much notice taken by writers; nor has it, I believe, been accurately diſtinguiſhed till of later years: it is now uſually termed ophthalmia purulenta, on account of the vaſt quantity of thick matter always diſcharged.

This may be eſteemed a diſorder both of the eyes and of the lids; but is in fact a ſevere inflammation of the whole tunica conjunctiva, which goes rapidly into a ſtate of general ſuppuration, and is ſo much thickened where it is reflected over the lids, that it turns out a conſiderable way the moment they are drawn aſunder. Very frequently the inflammation is communicated to the cornea itſelf, which if not timely attended to, will ſometimes burſt, and the patient be conſequently deprived of ſight, at leaſt for a time. Very

ſoon

ſoon after this, both the inflammation and diſcharge generally ceaſe; and the aqueous humour being in ſome caſes reſtored, and re-retained by a ſpeedy cicatrice of the cornea, the patient recovers a very tolerable degree of ſight. At other times, ſome internal part of the eye, and particularly the iris, is ſo greatly injured, or the cornea is ſo much impaired, that it remains collapſed, and all hope of future viſion is cut off. In any caſe, the patient rarely recovers without the ſight being more or leſs impaired for a time, by a greater or leſs number of ſpecks formed on the cornea. Nevertheleſs, we are frequently agreeably diſappointed at the decline of this dreadful inflammation, and have the happineſs of finding the eye much leſs injured than had been ſuſpected, either from the great diſcharge and long continuance of the inflammation, or from the appearance of the eye itſelf, when we were firſt able to get a ſight of it. For I have ſometimes known the whole cornea apparently much depreſſed, and at others, ſmaller indentations formed on different parts, and after all, the ſight been perfectly good as ſoon as the inflammation had completely ſubſided, without either cicatrice or ſpecks to be ſeen on the cornea.

This

This being, perhaps, the moſt violent of all inflammations, requires the ſpeedieſt aſſiſtance. The patient ſhould be let blood freely and repeatedly, (according to the age and habit of body), eſpecially in the neck, or by opening the temporal artery; the turgid veſſels paſſing over the ſclerotica ſhould be frequently divided; leeches ſhould be applied to the temples, and bliſters to the back, and behind the ears; the patient ſhould be purged gently; and the thickened tunica conjunctiva ſhould be deeply ſcarified once or twice a day, as long as it falls out ſo low as to prevent a clear ſight of the eye. The part ſhould at firſt be conſtantly wetted with cooling collyria, to which afterwards a little brandy and vitriol may be added, and a drop or two of laudanum be inſtilled into the eye, and every thing be attempted that may prevent or diminiſh ſuppuration; which I have known take place in a very few hours.

Should theſe means fail, or what very often happens, aſſiſtance be called in too late, the lids muſt be frequently drawn aſunder to let out the matter, by night as well as by day; and in the caſe of infants, in whom the matter will be more confined, the edges of the eye-lids ſhould be frequently greazed throughout

out the day, and at night be covered with a little of *Goulard*'s Cerate, ſpread upon very thin linen, and over that a light compreſs, hanging looſely over the eyes, dipped in the vegito mineral-water and brandy, or ſpread with a kind of liniment made by beating up alum in the white of an egg. Should the inflammation and diſcharge ſtill increaſe, a drop of laudanum, or of a ſolution of the green vitriol calcined to whiteneſs, ſhould be inſtilled into the eye, at leaſt once a day; which, whatever pain it may occaſion at the time, will counteract the inflammation more than any of the topical applications at a certain period of the diſeaſe, unleſs it be ſome one of the mercurial liniments before recommended.*

* In Mr. WARE's Treatiſe on *Ophthalmia*, ſtrong commendation is given to *Bates's aqua vitriolica camphorata*, diluted with about ſixteen times its quantity of water, as a collyrium, to be made uſe of from the firſt appearance of this inflammation. I have now for ſome years been in the habit of uſing it, in moſt caſes, in preference to other means, and with very good ſucceſs. But apart from this experience of its efficacy Mr. WARE's ideas of the complaint appear ſo perfectly to correſpond with my own, that it would ſeem to me an injuſtice to ſuch readers as may not be acquainted with that work, not to mention a remedy ſo well calculated to counteract inflammation, and recommended upon ſuch authority and experience.

In

In fine, the grand remedies early in the diſeaſe ſeem to be bliſters and topical bleedings, eſpecially by leeches; but then it is not the application of one or two that will anſwer any good end, though often repeated; but if ſix or eight to a child of four or five years of age, and a dozen to adults, be applied at once, eſpecially at going to bed, a ſtop will frequently be put to the moſt formidable inflammation, and nothing further be required than the uſe of ſome aſtringent collyrium, and to attend to the ſpecks, ſhould any be formed on the cornea. On the other hand, ſhould the inflammation continue many days, aſtringent applications muſt be had recourſe to, and the cortex be adminiſtered in large doſes.

THERE is an ophthalmia ſtill leſs noticed by writers than the former, which occurs ſeldomer than any other; and is rarely cured if not attended to very ſoon. It might be called *ophthalmia interna*, being a ſuffuſion of blood within the coats of the eye, appearing through the pupil; while the conjunctiva oftentimes preſerves for a while its natural colour, though at others, I believe it has, from the firſt, the appearance of the common ophthalmia; which, how-

however, uſually comes on in one ſtage or other of the diſeaſe.

It is ſometimes a complaint of long ſtanding, ſtealing on for a while almoſt imperceptibly, till the patient is alarmed, at being ſuddenly, almoſt deprived of ſight; which ſometimes as unexpectedly returns in a ſhort time, and goes away again as ſuddenly. It ſeems to be attended with ſome diſorder of the optic nerve, the pupil being ſomewhat dilated, and the retina rather indiſpoſed to contract, though the eye be expoſed to a ſtrong light.

It attacks people of different ages, and in young women is often attended with ſuppreſſion of the menſes, the return of which ſometimes removes the complaint. I never met with it in robuſt habits, nor have found general bleeding, or other antiphlogiſtic remedies of any uſe. Topical bleeding by leeches, and in the jugular vein, are preferable; and electricity has ſometimes been ſerviceable, though it has in others appeared to increaſe the complaint; which ſeems to depend upon the irritability and relaxation of the organ. Bark, therefore, and a bliſter on the head, touching the lids with ung. hydrarg. nitr. and dropping a little

a little laudanum often into the eye, ſcarifying the under-lids, and in the end, I think, ſea-bathing, are the moſt likely means of relief.

It will oftentimes be neceſſary to continue theſe remedies for a great length of time; having ſeen good effects produced by them after I had nearly given up all hope of doing any good. It always, I believe, attacks both eyes, and if attention be not paid to the complaint before the conjunctiva is much inflamed, the patient will after all, moſt probably, be in great meaſure deprived of ſight, the cornea, in that caſe, becoming perfectly opake.

I SHALL only drop another hint or two, and ſhall conclude all I mean at preſent to offer on diſorders of the eyes. It may, perhaps, appear to be a bold one, and by many people be condemned, as likely to injure ſo delicate an organ; but it is given from experience, which at firſt aroſe from accident, and in proper hands may be as ſafely, as advantageouſly uſed. This reſpects the aq. litharg. acet. which I have known made uſe of, undiluted, to advantage. I have, indeed, never made trial of it in this ſtate, but have uſed it in the proportion of one drop to three or four of water, and have never ſeen it do harm; or the extract

may

may be mixed up with olive oil into a liniment, which will give leſs pain, and will remain longer on the part.

It has already been ſaid, that the chronical ophthalmy often ariſes from atony, and it as frequently depends upon a morbid, or undue action of the parts, which in numberleſs inſtances is more certainly removed by active applications, than by any other means. I have long been ſatisfied of the juſtneſs of this idea, which I have ſo much inculcated in the former parts of this tract, and am happy to find a gentleman of ſo much reaſoning and judgment as the late Mr. HUNTER, ſupporting it by ſo many ſtriking facts, in his late treatiſe on the venereal diſeaſe. Indeed, we have often nothing elſe to do in various old ulcers, in certain habits of body, than to create a contrary and due ſtimulus, in order to remove pain, tumour, or ſpurious inflammation, and various other local indiſpoſitions, to which a morbid action of the parts has given riſe.*

By

* It may be objected, perhaps, that a great deal has been ſaid in the courſe of this little volume in favour of active applications; but the writer hopes, without reaſon for the leaſt ſuſpicion of his ſuppoſing them capable of doing every thing,

By this means it is, I doubt not, that the remedy laſt recommended, as well as the mercurial ones, have been of ſo much ſervice in the moſt obſtinate and long continued ophthalmias, after every uſual remedy had been tried without any laſting good effect.

A very ſmall portion of the former may be applied, by a camel-hair pencil, when the patient is in bed, and after a few times uſing, be repeated in the morning, if the complaint be not greatly abated, nor the means diſagree. The vaſt diſcharge produced in many chroni-

thing, or that a trial, at leaſt, ought to be made of them on almoſt every occaſion. Nothing, indeed, is further from his own ideas, who wiſhes only to lead young practitioners to diſtinguiſh caſes with judgment; and having done ſo, he doubts not they will find, that powerful external ſtimuli will have their place, and perhaps more frequently than may have been ſuſpected, and upon the moſt rational principles. And as a general apology, he would here obſerve, that he ſet out with no peculiar theory of his own, but being gradually and naturally led to the various trials he has made, repeated facts have conſtrained him to purſue a practice which has been very ſucceſsful, in his own hands and others; and he has the happineſs of finding it may be ſupported by ſound reaſoning and argument, which it required but ſlender abilities indeed to diſcover, or to arrange into as ſpecious a theory as a practice founded upon facts can ever ſtand in need of.

cal caſes by ſuch ſtimulant applications, and the action into which they throw the parts, are often the moſt likely means of removing many obſtinate complaints, not here particularly noticed, which have thickened the cornea, and not only greatly impaired the ſight, but have obliged the patient to keep the eyes in a ſtate of reſt for many weeks, and even months at a time, and occaſionally for ſeveral years.

I ſhall juſt obſerve what every one knows, that ſevere ophthalmias induce ſmall ſpecks, and ſometimes very conſiderable opacity of the cornea: it is, however, perhaps not very generally known, that ſo ſimple a remedy as two or three drops of the aq. cupri ammon. inſtilled into the eye for a length of time, infallibly removes all that have not been of very long ſtanding, without the painful and diſagreeable aſſiſtance of cauſtics or other remedy.

I ſhall now cloſe the above obſervations* with the following extraordinary caſe, which may ſerve to ſhew what nature is ſometimes capable of doing for herſelf.

* See a more full account of diſorders of the eye, in the author's Treatiſe on the *Diſeaſes of Children, vol.* ij.

MRS.

MRS. HOPPEY, aged about thirty years, the wife of a grocer formerly of *Great Ruſſel-ſtreet, Bloomſbury*, was attacked with the common ſymptoms of ophthalmy, at a time I was making occaſional viſits to one of her children, and was therefore deſired to look at her eye. The charge of the complaint was not, however, properly committed to me, but from time to time I gave ſuch directions as appeared to me to be requiſite; which were not, indeed, ſo perfectly complied with, as perhaps they ought to have been. At one of theſe viſits, thinking it neceſſary *Mrs. Hoppey* ſhould be blooded again, on account of the ſevere pain ſhe underwent, it was ſtrongly objected to, and as I afterwards underſtood, on account of ſome ſcruples her apothecary entertained, who had formerly practiſed as a ſurgeon in the country. On this account, the late SIR CÆSAR HAWKINS was conſulted, who approving of the plan that had been purſued, and intimating the importance of great attention in order to her ſafety, I afterwards viſited *Mrs. Hoppey* daily, and SIR CÆSAR HAWKINS was occaſionally called in.

Soon after this time, and on the abatement of the inflammation, ſhe loſt the ſight of the eye, which likewiſe began to be enlarged, and

puſhed forwards, the veſſels of the lids, ſides of the noſe, and forehead were ſwelled, and were attended with conſiderable pulſation. Theſe ſymptoms increaſed for ſeveral months, notwithſtanding different means made uſe of, till the eye became greatly enlarged, and ſeemed nearly forced out of the orbit; it was therefore judged proper to extirpate it, in the apprehenſion of an aneuriſm within the orbit, which it was expected might ſuddenly give way. About this time, the late *Mr. Watſon* was likewiſe conſulted; the operation was determined upon, and the day for it was to be fixed as I ſhould ſettle with SIR CÆSAR HAWKINS.

In this interval, I met with an accident by a fall, which confined me for three or four weeks to the houſe, and I requeſted SIR CÆSAR HAWKINS to perform the operation for me, if it ſhould be thought that waiting for my getting abroad might be hazardous to the patient. After making *Mrs. Hoppey* a viſit with a view to ſettling this matter, SIR CÆSAR HAWKINS called upon me, and propoſed deferring the operation a few days; adding, that he conceived the eye had rather a better appearance, and that, although he rather *hoped*, than was *ſatisfied* of this particular, he thought it might be truſted for a few days, with the cautions

cautions and directions he had given the patient. In about a week after this he acquainted me, that he wiſhed the operation might be poſtponed a while longer, as the tumour was certainly not increaſed, if it were not diminiſhed; and of which I ſhould be a better judge, as I had not ſeen it for ſome time.

As ſoon as I could get abroad I waited upon *Mrs. Hoppey*, and was ſatisfied the eye was not more enlarged, nor projected, than it had been, and I thought the pulſation was diminiſhed; the pain likewiſe being leſs, and time having encouraged our patient as well as ourſelves, to hope there might be leſs danger of a ſudden rupture than we had once apprehended, all thought of extirpation was ſoon afterwards laid aſide, unleſs ſome new ſymptom ſhould indicate its neceſſity.

During this ſuſpence the pain became very inconſiderable, and I ſaw my patient only once a week; and a while afterwards the pain leaving her intirely, I viſited her only once in a month, for above a year. At one of theſe viſits I was informed ſhe was well; and though ſhe knew not for certain when the change had firſt taken place, ſhe had a few mornings before obſerved, whilſt ſtanding at her glaſs, that

the affected eye looked nearly as well as the other, and that upon closing the latter, she found her sight also was perfectly restored.

Upon this agreeable news I took a formal leave of her, only when I had occasion to visit any of the family, or was at leisure when I passed near her door, I inquired after her, and examined the eye; which for several years continued very well, having only a certain awkward look, and a kind of squinting that never totally left her.

Eleven years after her recovery she went to reside at *Manchester*, and continued there in very good health; the eye formerly affected becoming, as she thought, stronger than the other, but was sometimes a little painful in frosty weather.

Nine years after retiring into the country the squinting was observed to increase, till the eye was at length turned quite to one side; it was likewise pushed a little forward again, though the sight remained unimpaired. But some weeks after this, she was suddenly attacked with excruciating pain, which obliged her to go to bed in the middle of the day, and send to her apothecary; who applied a blister to the nape of

of the neck. In a few hours after this attack, ſhe loſt the ſight of the eye, which inſtead of continuing to puſh forwards, was rather withdrawn within the orbit, and the upper eye-lid dropped; which ſhe never afterwards raiſed.

This violent pain continued for three days, which ſhe compared to that ſhe had ſuffered in *London*, about the commencement of the complaint, and which ſhe obſerved, continued very ſevere the ſame length of time. At the decline of the pain, ſhe became at times comatoſe, and after lying in that ſtate for five days, ſhe expired at the time, as I am informed, ſhe was thought to be recovering. I am ſorry to have to remark, that, though ſhe had very conſiderately given her conſent to the head being opened after death, her hint was neglected; which had ſhe died in *London* I ſhould have been happy to have embraced, and thereby have aſcertained exactly the nature of this extraordinary complaint.

TREATMENT

OF THE

MAMMARY-ABSCESS

AND

Sore-Nipples

OF

LYING-IN WOMEN.

TREATMENT

OF THE

MAMMARY-ABSCESS, &c.

BEFORE I ſpeak of the milk-abſceſs, I ſhall in this place obſerve, what perhaps ſome gentlemen may thank me for, that I can venture to ſay, the aſtringent ſolution I have ſo frequently recommended,* is the beſt application hitherto known for that obſtinate and painful ſore on the nipples of ſuckling women, for which almoſt every thing has been tried—and almoſt in vain. The nipples need only to be touched with it ſeveral times in the day, either by the point of the finger, or a camel-hair pencil; the part being afterwards covered

* The vitr. viride ad albitudinem calcinatum, diſſolved in common water. See page 181.

with

with the patient's hand, or other contrivance, to prevent the ſolution being wiped off; the ſtrength of which muſt be determined by the degree of tenderneſs and extent of the ſore. I think I have found ſome advantage in theſe caſes, and certainly, in drawing out a bad nipple, by covering it with a large nutmeg, hollowed out, and the edges left flat. But whether the warm aromatic quality of the nut has contributed to this, or it has ariſen merely from defending the tender nipple both from the linen, which becomes rough by the milk drying upon it; and from the common air, I am not at all anxious to determine. Such a contrivance is always at hand, and attended with no trouble, though worn pretty conſtantly, and I therefore often adviſe the uſe of it as ſoon as the nipples begin to get ſore. This is likewiſe, doubtleſs, the beſt time to have recourſe to the ſolution, which has hitherto anſwered exceedingly well, ever ſince I have been acquainted with it. In ſome very bad caſes, where the chaps are ſo deep that the ſolution cannot be retained on the part, and are exquiſitely tender, eſpecially if of long ſtanding, it will be uſeful to cover the part with an ointment that is not relaxing, but moderately warm and drying, as the common white cerate may be rendered by ſimmering a little

a little brandy in it. A caſe ſometimes occurs, in which the nipple is not ſo much chapped, as it is enlarged and inflamed, and attended with an oozing of ſharp ſerum. Here, after waſhing the part with the ſolution made very weak, ſprinkling it with a little finely powdered gum tragacanth is of very ſingular ſervice. But in other inſtances, my chief dependence is upon the ſolution, which if properly attended to, will remove the complaint. It has alſo ſtood the teſt of the *Britiſh Lying-in Hoſpital*, where it has been for a long time made uſe of at my deſire, and with the expected ſucceſs; though there are always in the hoſpital many women thus affected, and out of ſuch numbers, it is probable, all the various kinds of ſore nipples muſt have taken place.

It may reaſonably be expected, that ſomething ſhould be ſaid of the ſucceſs of this remedy ſince theſe obſervations firſt appeared; and the writer can with truth aſſure the public, that his own experience has not ſerved to leſſen the good opinion he entertained of it, though ſome other practitioners ſeem to have made uſe of it with leſs ſucceſs. It is to be lamented, that if men are generally found partial to their own diſcoveries, others are oftentimes

times proportionably prejudiced againſt them; ſo that, if the ſucceſs of any means ſhould depend on a more than ordinary attention to its ſtrength and mode of application, its credit is not likely to be increaſed in their hands. All that the writer need to ſay of this remedy is, that his own patients have been greatly benefited by it, and have been glad to recommend it to others; and that if applied with care and due attention to its ſtrength and effects, it will be found, at leaſt, much oftener ſucceſsful than any means hitherto in general uſe; and this is all that he means to affirm.—The tongue will be the beſt ordinary teſt of its due ſtrength, which muſt always be varied according to the degree of pain and other effects; always beginning with it ſufficiently weak. On theſe accounts, it can be no wonder, if it ſhould do leſs good when left in the hands of nurſes, or uſed merely at the diſcretion of patients, ſome of whom do not make uſe of it frequently enough, whilſt others are inclined, as improperly, to keep it conſtantly on the part, or make it too ſtrong. But in the hands of phyſicians or ſurgeons, who know what effects it is deſigned to produce, and will regulate it accordingly, it cannot fail to gain them credit, and give ſatisfaction, provided they will for a few days attend to it themſelves, with a little of that

pains

pains men uſually beſtow on inventions of their own.

One great advantage of the ſolution is, that it is perfectly harmleſs, and does not therefore require the caution of being wiped off from the part, when the child is laid to the breaſt. Being alſo lightly aſtringent and deterſive, without creating the pain, or that unpleaſant and harſh dryneſs, which other aſtringents produce, renders it as promiſing, as experience hath proved it to be ſucceſsful, in this obſtinate complaint; which beſides the great pain that attends it, has frequently fruſtrated a moſt laudable and pleaſing impulſe of nature, by preventing the fond mother from ſupplying the firſt wants of the tender infant, to which ſhe has given birth.

But the evil frequently does not ſtop here; the pain and inflammation of the nipples often extend to the breaſt itſelf, and ſuppuration takes place.—I proceed therefore to make ſome obſervations on this ſubject, which though important, has not, that I know of, been yet publicly treated of.

It would be needleſs, in this place, to take up the reader's time, by adverting to the various

rious other occaſions which threaten ſuch a complaint, ſince, perhaps, the only one in the patient's power to prevent, is that of taking cold; as frequent an occaſion, indeed, as any, and againſt which every precaution ought to be taken. With a view to this, it may be obſerved, that the cuſtom of bathing the breaſts of women, who do not ſuckle, frequently proves very injurious, though it has not, perhaps, been generally ſuſpected. The rubbing in a little oil and ſpirit, as ſoon as the patient is delivered, may be harmleſs enough; though if ſomething muſt be done, in compliance with cuſtom, the application of a diachylon plaſter will anſwer every ordinary intention, without any of the diſadvantages which attend the frequent repetition of uſeleſs embrocations, which expoſe the part to taking cold. And as the above, and any other ſuch lotions as nurſes uſually recommend, and place great confidence in, have no ſuch power as is generally attributed to them, they are certainly much better let alone: and if it ſhould be thought proper to have recourſe to ſuch as actually poſſeſs any conſiderably repelling property, they will, of courſe, be directed by the practitioner himſelf, who will give every neceſſary caution; as the conſequences of cold taken in the application,

plication, are generally much more likely to give riſe to ſuppuration, than leaving the buſineſs to nature.*

The firſt ſymptoms of ſuch an unfavourable turn, are uſually a deep lancinating pain, hardneſs and tumour in ſome part of the breaſt, and a conſiderable diminution of the cuſtomary diſcharge of milk by the nipple. This is the moment to prevent the apprehended miſchief, as a very ſhort delay renders the means ineffectual; the ſkin ſoon becoming diſcoloured, and the breaſt greatly enlarged. To remedy this, immediate recourſe ſhould be had to bleeding, and to laxative and anodyne medicines; but above all to ſedative applications, which are uſually found to be the

* It is perhaps worthy of remark on this occaſion, that the mammary-abſceſs was for a number of years a very common complaint in the *Britiſh Lying-in Hoſpital*; and has always been attributed to cold, as the moſt general cauſe. The juſtneſs of this ſuſpicion has been confirmed ſince water-cloſets have been conſtructed on every floor. Previous to this, ſeveral women, from motives of delicacy, were inclined to go, too early, acroſs a paved yard, though continually cautioned againſt it: but for full two years, ſince that contrivance has been made, there have been only two inſtances of the mammary-abſceſs: and the like exemption has continued ſince the laſt edition.—Though this circumſtance may, perhaps, be thought to prove too much, it nevertheleſs being a fact, ought to have its proper weight.

moſt powerful diſcutients. Sometimes, however, ſolutions of crude ſal ammoniac, with the addition of a good quantity of ſpirit, and if the inflammation be very recent, ſome vinegar, will be more adviſeable than ſaturnine remedies. Compreſſes of coarſe linen-cloth, wetted in ſuch a liquor made moderately warm, and renewed as often as they become dry, are abundantly preferable to heating and relaxing fomentations or poultices, to which ſurgeons have uſually had recourſe.

When the above means are made uſe of in proper time, the inflammatory ſymptoms will ſoon diſappear, the pain be entirely removed, and if the milk runs freely again from the nipple, there will be no further danger of ſuppuration. On the other hand, if there be not a very early and conſiderable abatement of the firſt ſymptoms, however ſlowly the proceſs may go on, the breaſt will ſeldom fail to ſuppurate. In this ſtate, therefore, the plan ought very ſoon to be changed, in order to forward the work of maturation. And this, wherever the pulſe will allow of bleeding, will often be haſtened by taking away a ſmall quantity of blood, once or twice, from the arm; though the patient ſhould already have been let blood with a very different view.

This

This will likewiſe be always a ſafe practice in plethoric habits, or where the inflammation is attended with fever, and the event yet doubtful: ſhould ſuppuration finally take place, the bleeding will likewiſe tend to leſſen the ſize of the abſceſs.

The whole breaſt ſhould now be covered with a mild ſuppurative poultice,* which muſt be continued till the matter can be felt, and may then be changed for one of mere bread and milk; the part ſhould alſo be fomented twice a day, if the abſceſs threatens to be large, and does not incline to ripen faſt, after there are evident tokens of ſuppuration. The circumſtance of early maturation is of the greateſt importance, for in proportion to the

* A very good poultice of this kind, is that formerly made uſe of by *Plunket*, and is preferable to that of mere linſeed. To half a pint of milk ſhould be put about three table ſpoonsful of finely powdered linſeed: after boiling a few minutes, add a ſmall quantity of crumbs of bread, ſufficient to bring it to the conſiſtence of a poultice, to which is to be added, on taking it off the fire, the yelk of one egg. This will make a very ſmooth poultice, and much lighter than mere bread and milk; an advantage, in the caſe of much inflammation, eſpecially in glandular parts, too obvious to be particularly inſiſted upon.—As a *mean* of fomentation, a wooden-bowl of a proper ſize, made hot in boiling water, is much leſs troubleſome than wet flannels.

length of time taken up in that proceſs, will be the ſize of the abſceſs, and the time afterwards neceſſary for its cure; at leaſt, this is pretty uniformly the caſe.

Of no leſs importance is the manner of treating abſceſſes after the matter is well formed. And here I am conſtrained to oppoſe the ancient and common method of ſurgeons, that of making a large opening with the knife; which can ſeldom, or never be neceſſary. This happy idea originated from the late ingenious *Dr. Hunter*, (to whoſe unremitted labours in the improvement of his profeſſion, as well as in many other inſtances, the public is ſo eminently indebted;) and I believe, that gentlemen in the department of midwifery, at leaſt in *London*, are well acquainted with the many advantages of ſparing women this painful operation: but as it has not been noticed by ſurgical writers, nor, I think, ſufficiently approved of by the generality of the profeſſion, there are probably many practitioners who are not duly acquainted with it.

The impropriety of making large openings in the breaſt, ariſes, I apprehend, from its glandular ſtructure, and peculiar uſe, together with the harmleſs nature of the complaint.

But

But I ſhall not enlarge here, on the many unfavourable circumſtances attending ſuch a practice, and the tedioufneſs of the cure as the inevitable conſequence. I mean only to hint at a method every wiſe preferable to ſo painful a proceſs. But not only are the larger inciſions highly improper, which are made with the knife, but ſmaller openings with a lancet are generally better let alone; not only becauſe commonly needleſs, and very diſtreſſing to the patient, but the breaſt will heal ſooner when the abſceſs is left to burſt of itſelf. Hereby, we are ſure the ſuppuration will become as complete as the caſe will admit of, and the little jagged round aperture nature makes for herſelf, will keep open much better than the ſmooth puncture from a lancet. All that is commonly neceſſary, is to cover the part with a ſoft bread and milk poultice; to keep it well ſupported by an eaſy bandage; and carefully to preſs out the matter, and renew the poultice twice or three times a day.

I cannot avoid taking notice in this place, that whilſt in one *Review* this practice is ſaid to have been long underſtood, and even publiſhed to the world, (though I muſt ſtill confeſs, that I never happened to meet with the ac-

count,) a critique appeared in the *Engliſh Review* of a very different caſt. To the Editor of this (as well as thoſe of the *Monthly* and *Critical Reviews*) I, indeed, feel myſelf much indebted for a very reſpectful and candid account of the firſt edition of this work. Objections, however, are made to leaving milky abſceſſes to burſt of themſelves, and perhaps ſome of the firſt ſurgeons may be of the ſame opinion; which renders this point very worthy of further diſcuſſion. It ſcarce need be obſerved, that I had myſelf in the very next paragraph offered certain exceptions to this rule, which, however, as a general one, I am, from the beſt motives, inclined to defend.

I am aware, that the patient may ſometimes undergo ſome very conſiderable pain for twelve or four and twenty hours, by the matter being left to make its own way through the ſkin, and I have myſelf formerly made this circumſtance an argument for opening ſome ſmall abſceſſes; but, from a fair compariſon of all the effects of each mode, am ſatisfied to which the preference ought to be given. For, beſides that the pain which leaving an abſceſs to burſt of itſelf, may without any diſadvantage be much abated, or intirely removed by a doſe or two of laudanum, I have on the other

other hand, after having opened theſe abſceſſes in order to obviate that pain, received no thanks from my patients; who partly from the dread ſome people have of any cutting inſtrument, and partly from the actual pain of the little operation, and its conſequences for ſome hours afterwards, have on a ſubſequent occaſion determined to leave the buſineſs to nature, and to endure with patience the effects of her operations, or at moſt, to ſtun the pain by an opiate taken at bed-time. But it has been ſuggeſted, that there are other, and more material advantages reſulting from a well-timed opening made by the lancet, and that for the want of it, the little orifice will often be cloſed up, and a freſh abſceſs be formed. In anſwer to this, I muſt ſay, that I am conſtrained to doubt the juſtneſs of this obſervation. I was myſelf bred up to be of this opinion, and was with difficulty led to change it; but a long and pretty extenſive practice, and much obſervation, have, as I think, led me to form a more juſt opinion of the matter. The fact, indeed, is, that the little apertures may be very eaſily and certainly kept open, as long as there remains any thing to be diſcharged from parts with which they communicate, and that freſh impoſthumations will not be formed, but in caſes where other parts of the breaſt

are in an obſtructed and diſtempered ſtate, and not yet inclined to ſuppuration; in which caſe, let the firſt abſceſs be opened, and treated in whatever manner it may, new impoſthumations will be formed, and, indeed, in this caſe, are to be deſired. Whereas, when other diſeaſed parts have communicated with the firſt abſceſs, I have without difficulty kept an orifice (not larger than a pin's head) for many weeks open, till the various indurated parts having ſuppurated, the matter has found its way to the firſt and only orifice, which has diſcharged very conſiderably, and for a long time together, without any interruption; and when the breaſt has got well, only the ſmalleſt ſcar imaginable has remained. And it might be here noticed again, that the little jagged aperture which nature has made for herſelf, keeps open much better than one from the lancet, though made four or five times as large: every ſurgeon knowing how ſoon inciſed wounds are diſpoſed to heal up at the angles, eſpecially if extended into the ſound ſkin, leaving only a kind of fiſtulous orifice in the centre. So that upon the whole, after having beſtowed much attention on this ſubject, it is ſtill my unprejudiced opinion, that it is in general beſt to leave the buſineſs to nature;

nature; and that if there may be any merit in being the firſt publiſher of ſuch an opinion, it properly belongs to this little work.

The above method of diſcharging the matter, it was ſaid, is uſually the beſt; there are, however, inſtances, where I have thought ſmall punctures made with the point of a lancet have their uſe. Such are, firſt, abſceſſes that ſuppurate very quick, and with exceſſive cutaneous inflammation; whereby, early and pretty large ſloughs will ſoon be formed, if the ulcer be left to break, though ſome parts remain yet very hard around the protruding ſurface. So likewiſe in thoſe caſes where the whole breaſt is very hard, and the habit not diſpoſed to form matter ſo plentifully, as the indurated ſtate of the part ſeems to require. Here a great number of very ſmall impoſthumations are formed; come very ſlowly to a head; often thicken and harden the ſkin; are but little diſpoſed to break, and ceaſe to diſcharge as ſoon as they have vent. The little tumours will even ſometimes ſubſide, if an opening is not made ſoon after the matter can be felt; and the induration remains a long time nearly the ſame. Poultices of more potential heat than thoſe of mere bread and milk, are here particularly ſerviceable, as well as light

light frictions with a weak volatile liniment, and ſometimes a cautious uſe of the unguent. hydrargyri; which ſhould not be forcibly rubbed in, but ſpread lightly over the breaſt. At this period, the exhibition of the bark is found uſeful in ſome conſtitutions; in others, ſmall doſes of corroſive ſublimate; and I have ſometimes found the decoction of ſarſaparilla, and powder of millipedes, or ſweating with pulv. ipecac. comp. of very conſiderable ſervice; as well as purging now and then with rhubarb and calomel.

The worſt caſes I have met with, have ariſen from cold taken after the end of the month, and are, perhaps, more common in women who have not ſuckled their children, nor been properly attentive to the turn of the milk. Here, one or more very large lumps are often pretty ſuddenly formed, or ſometimes ſmaller ones almoſt inſenſibly run together, and occupy a great part of the breaſt; are always exceedingly hard, but are not uſually painful at firſt. The appearance, in ſome inſtances, is very alarming, but they all, nevertheleſs, end perfectly well if prudently managed. I have been called to caſes of ſeveral months ſtanding, where the breaſt had entirely loſt its natural appearance, had become hard in every part,

part, flattened, and the nipple been almoſt obliterated. When the diſeaſe extends to ſuch a degree, ſuppuration muſt take place, and, indeed, is a deſirable event, as otherwiſe miſchief would enſue; for I believe, an entire reſolution of the tumour is not to be effected. Hence, ſaturnine applications, which have been much too indiſcriminately made uſe of, are here highly improper. I have ſeen nothing ſo uſeful as mild poultices, and a cautious uſe of the unguentum hydrargyri, from half a ſcruple to half a drachm, repeated *pro ratione effectûs*, and now and then taking away a ſmall quantity of blood; while the body has been kept open by the ſal rupellens. polychreſt. or other cooling laxative.

By theſe means, I have ſucceeded in caſes to appearance exceedingly unfavourable, and not at firſt to be diſtinguiſhed from incurable ſchirrhi; which have, nevertheleſs, got well in a very reaſonable time, and the patients have afterwards ſuckled children without the leaſt inconvenience. In ſuch caſes, more eſpecially, the abſceſs when formed ſhould always be left to burſt of itſelf, the uſe of the knife having a direct tendency to increaſe the induration of the parts, as well as to injure the ſtructure of the breaſt; and at the beſt, it has been

been ſaid, is in moſt caſes, perfectly unneceſſary.

Sometimes, where the ſuppuration has gone on very ſlowly, an oozing of ichor or ſanies will remain, and often a diſcharge of milk from the ſore, long after the tumour and hardneſs are removed. And I have been applied to, where a ſmall fiſtulous ſore has remained for ſome months, which I have ſafely dried up in as few days, by dreſſing it with aq. litharg. acet. comp. made very ſtrong: but if the ſinus runs deep, the aſtringent ſolution before-mentioned, uſed by way of an injection, may be preferable.

The above hints are thrown together, as the reſult of long experience both in the *Britiſh Lying-in Hoſpital*, and in private practice; not, indeed, as a treatiſe upon abſceſſes of the breaſt, but as the out-lines of a pleaſant and ſafe practice, which every man of experience will know how to apply, and the young practitioner may poſſibly profit from.

But in whatever way any ſuch abſceſſes may be treated, and however preferable this lenient method moſt certainly is to the uſe of the knife, and to the large inciſions formerly made, the

the milk-abſceſs will very often prove exceedingly painful, while the neceſſary long uſe of poultices muſt render this complaint very diſagreeable to the patient. If the number therefore may be in the leaſt diminiſhed, by the ſpeedy cure of ſore nipples, ſuch a remedy muſt be acceptable, in a double reſpect, to gentlemen engaged in the department of *midwifery*.*—Perhaps, ſurgeons in general may be glad to hear, that the aſtringent ſolution is very uſeful in other fiſtulous ſores than thoſe juſt mentioned, and is alſo an excellent application to expedite the healing of large burns, as well as ſome troubleſome venereal ulcers. And I am yet in hopes, when it ſhall come into hoſpital uſe, (which I do not know it ever has,) it may be found very ſerviceable from its friendly aſtringency, in many caſes which I ſhall not yet take upon me to ſpeak of. The vitr. cærul. calcined to redneſs is a very different preparation, as well as a ſolution of it in its natural ſtate. The latter has been long in hoſpital uſe, and particularly *St. Thomas's*, but this is not only a very drying, but a cauſtic application, and frequently

* As a prophylactic, I can ſafely venture to recommend *Relfe's Nipple-ſhield*; now ſold at *Mr. Savigny's*, *King-ſtreet*, *Covent-garden*.

offends

offends irritable ſores, unleſs it be made extremely weak; by which it will be rendered greatly inferior to the ſolution I have recommended.

STRICTURES

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THOUGH various are the ſources of knowledge in this country, they muſt ſtill be conſidered as imperfect; and perhaps, nothing is ſo much wanted for the improvement of the *healing art*, as a public inſtitution ſimilar to the *Académie Royal de Chirurgie*, as eſtabliſhed in *Paris*. In *London* there have been of late years, indeed, ſome private Societies ſomewhat of that kind; but the number of their reſpective members is too limited, and familiar admiſſion, as a viſiter, is premitted only to a few. Beſides, the members of theſe ſocieties conſiſt chiefly of ſtudents, who attend

rather to learn than to inſtruct; whence ſuch eſtabliſhments are rather calculated to communicate a little ſuperficial knowledge, in a ſhort time, than to perfect any of the members; many of whom continue only a year or two in *London*. The inſtitution, in ſome reſpects, more reſembling that of *Paris*, is with the *College* of *Phyſicians*, whoſe *Fellows*, at ſtated times, read papers, drawn up by themſelves and others, on medical ſubjects. But though their judgment and impartiality will not be ſuſpected, and their ſelection of papers may give more ſatisfaction, than any private editors; yet this inſtitution likewiſe falls ſhort of the preſent intention: for beſides that their plan is too limited, their readings and obſervations are not open to the profeſſion in general, and eſpecially to the younger part of it, who have every thing to learn

For the want of ſuch an Inſtitution, young men, eſpecially ſuch as are to practiſe in the metropolis, are conſtrained to read a great deal, and often at a venture; or if they do not, they will loſe many a uſeful hint that is to be picked up in various works where but little might be expected. On the other hand, many a point of uſeful knowledge is loſt, or

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confined to a very ſmall circle, not ſo much for its want of importance, as from its being oftentimes a ſingle obſervation, which for want of an eaſy mode of communication, can circulate only in a way of converſation; whereby the young artiſt, conceiving himſelf unlikely to receive the credit of the obſervation, very frequently confines it to himſelf. But Societies with the firſt Phyſicians and Surgeons at their head, and open, under proper regulations, to all the ſtudents in medicine, where public ſpeaking, and reading of ſhort papers were encouraged, the ſubjects properly diſcuſſed, and the reſult of experience and inquiry duly publiſhed, would quickly ſpread uſeful knowledge through the kingdom, reſcue many a good practical hint from oblivion, and prevent a great number of larger works on the ſame ſubject, (each of which inquiſitive men are obliged to wade through;) and would nearly, if not entirely, ſuppreſs many trifling publications.

I have been led into theſe reflections from conſidering different parts of the preſent little work, and eſpecially the ſubject immediately in hand; on which I deſign to ſay ſo very little, that it might well have been ſuppreſſed, but from the perſuaſion it will con-

tain ſome hints not ſufficiently known, eſpecially by ſtudents, and for which the young reader of the former parts of the work may poſſibly find occaſion, before the hints might otherwiſe fall in his way.

It was on this account, that the firſt edition of my Treatiſe upon Ulcers of the Legs was not publiſhed by itſelf; to which alone, however, I had firſt turned my thoughts. Perſuaded, nevertheleſs, as I was, that the treatment of ſome ſcrophulous tumours might be improved upon, and that the moſt eaſy and ſafe method of managing the milky-abſceſs, as well as other matters there treated of, were, by no means, generally known; the work was ſuffered to put on that miſcellaneous appearance, and for the like reaſons has received the additions now ſubmitted to the Public; aware of the cenſures to which it may be on this, as well as other accounts, expoſed, I am, nevertheleſs, ambitious to add my ſmall mite to a treaſury of knowledge ſo uſeful to the world as the *Healing-art*, however the execution may be criticiſed, or the author miſjudged. With the candid, however, it is hoped, the apology may be accepted (though immethodically introduced in this place) as well for the work at large, as for the preſent digreſ-

digreſſion, by way of introduction to the very few hints to be offered on the ſubject of Gangrene.

GANGRENES may be diſtinguiſhed into four kinds; ſuch as ariſe from irritation, attended with more or leſs of local inflammation; from an inflammatory diatheſis of the ſyſtem; from general debility; and from dyſcracy. To each of theſe ſpecies, external injuries may give riſe, or become the remote cauſe.

From this variety, though not always clearly underſtood, have ariſen the different means of cure extolled in different ages and countries, and by different practitioners in the ſame age and ſituation.

The moſt dangerous and frequently fatal gangrene, is that which attends, and is ſupported by a bad habit of body; in which opiates, cordials, tonics external and internal, have been found equally inefficacious; a permanent cauſe of morbid irritation or atony prevailing, which is ſometimes out of the reach of art, eſpecially in aged ſubjects, and in infants.

More however may be effected even here, or at leaſt, in ſpreading ſphaceli ſuſpected to depend upon a certain habit, as well as in gangrenes from other cauſes, by mere external applications, than may have uſually been imagined, and has been one inducement to me to intrude theſe hints on the Public.

It is not my intention to enlarge on this diſorder in general, or to review all that has at different times been advanced; this diſeaſe having been largely diſcuſſed, and various ſucceſsful modes of treatment been recommended. It is certain, however, that neither cordials, volatile ſalts, opiates, nor even the bark, are efficacious alike, or by any means proper, in every ſpecies of gangrene; though the latter, ſince the time of *Douglas*, has been ſo much depended upon, that even *Mr. Pott*, when he firſt recommended the uſe of opium in gangrenes of the toes, for which the public has been judged much indebted to him, ſeems cautious of being ſuſpected of ſpeaking diſreſpectfully of a medicine, which in every other ſpecies of gangrene, he himſelf appears to eſteem almoſt a ſpecific.

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Every art is confeſſedly imperfect, but there would certainly be leſs of imperfection in the practice of phyſic, were ſtudents better directed in their firſt reſearches; which muſt, however, greatly depend upon their teachers, who ought to lead them between the extremes of implicit confidence, and what may be called ſcientific ſcepticiſm. There is a degree of empyriciſm pervading every branch of medicine; and too many aware of this, are found running into the maze of theory, and therefore give credit to nothing that they cannot explain, though their arguments are frequently convincing to none but themſelves.

Every practitioner, however, ſhould have ſome direct view in every thing he preſcribes, and ought to know what he is to expect from every medicine or topical application, however at a loſs about its preciſe mode of operation. For the want of this, means of cure for various diſeaſes have been handed down to us, which numbers implicitly adopt without any diſcrimination of cauſes; and therefore fail of effecting a cure, whilſt they are employing excellent remedies for one ſpecies of a diſeaſe that has various modifications. Hence it is, that the bark and cordials have been ſo

univerſally extolled for their wonderful ſucceſs in gangrenes, for different ſpecies of which they are almoſt ſpecifics, whilſt they as conſtantly fail in others, to the ſurpriſe only of thoſe, who are preſcribing to the *name* of a diſeaſe, without attending to concomitant ſymptoms, and different conſtitutions.

The bark failing in ſo many inſtances, opium, it has been ſaid, has of late years become a faſhionable medicine in gangrenes, eſpecially of the extremities; and though it has been ſerviceable in other caſes than thoſe for which it was firſt adviſed by *Mr. Pott*, has alſo been productive of miſchief when preſcribed without that due diſcrimination, (more attended to, perhaps, by *Mr. Hunter*, than any other writer on this ſubject, that I know of,) which I ſhall now in a few inſtances endeavour to point out to younger practitioners.*

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* As it is a long time ſince theſe obſervations were drawn up, (which have been delayed for want of time to review the tract upon ulcers) I had not then ſeen the laſt edition of *Mr. Bell's* Surgery, in which are many valuable practical obſervations, and excellent diſtinctions of gangrenes. Had he more completely accompliſhed this deſign, and he himſelf had experience of the great advantages ariſing from a due recourſe to opium, in very many caſes, I ſhould have thought the expediency of theſe hints entirely ſuperſeded. But *Mr. Bell*, does no more than barely mention that remedy, in

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Gangrenes are frequently attended with much true inflammation, and ſometimes are preceded and cauſed by it; and in this caſe, however rapid the progreſs of the gangrene may be, both the bark and other tonics, with every kind of cordial, ought entirely to be refrained from; and bleeding, laxatives, and cooling medicines be exhibited in their ſtead, with emollient fomentations and cataplaſms, (not applied too hot) to abate the ſenſibility of the part, and promote ſuppuration. After theſe evacuations, an opiate ſhould generally be adminiſtered at night, (and is proper in every gangrene where the pain is conſiderable); and theſe means ſhould be continued as long (though rarely many days) as the inflammatory diatheſis ſhall evidently prevail.* For as long as this ſhall continue, the blood remain ſizy, and perhaps the bowels coſtive, loading them with bark, which the ſtomach cannot digeſt, is only adding fuel to fire, by augmenting the load, or increaſing the action

a note, as having been recommended upon the authority of *Mr. Pott.*

* Since the former edition of this work, ſome good obſervations have been made by *Mr. Kentiſh* of *New-caſtle*, on repeated bleedings in gangrene from the oſſification of an artery.

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of the ſyſtem, and rendering the partially obſtructed veſſels totally impervious.

But there is often local inflammation and great pain, attended with a quick and even tenſe pulſe, that depends more upon ſpaſm, than a true inflammatory cauſe, eſpecially in old people. Here, much caution and general knowledge is required; but uſually opium is the beſt remedy, and may be ſafely adminiſtered every four or ſix hours, as the pain may require, after two or three ſtools have been procured by a gentle laxative or a clyſter. Should opium be the proper remedy, it will almoſt immediately prove uſeful; after which, the bark and wine, or other cordial ſhould be directed; but more eſpecially the bark, as in old people the ſyſtem is debilitated. For bark is evidently a tonic, and as ſuch has a tendency to ſtrengthen the general ſyſtem; whereas cordials are only temporary ſtimuli, and where the habit continues debilitated, only act as an increaſe of power in mechanics, and ſerve to haſten the deſtruction of the machine.

But ſhould this, or any other plan fail of producing ſome amendment, it ought not to be long perſevered in, as it is poſſible we may have miſtaken both the cauſe of the diſeaſe and

and the conſtitution of the patient; for if our remedies be properly adapted, however rapid the progreſs of the gangrene may have been, it will uſually be very ſoon checked. Whereas, when a gangrene has continued to ſpread for days, and even weeks, under the ſame treatment, (as I have ſeen under eminent practitioners in regard to the bark;) if it has at length ſtopped, and the patient recovered, the recovery may ſafely be attributed to the ſtrength of the conſtitution, of which the inflammatory diſpoſition has been brought down by the length of the diſeaſe, rather than to the propriety of the means that have been made uſe of.

On the other hand, I have ſeen a rapidly ſpreading gangrene, even in advanced years, where bark has been adminiſtered freely without any good effect, immediately checked upon taking away twelve or fourteen ounces of highly inflamed and ſizy blood, unloading the bowels, and inſtead of cordials and wine, refreſhing the heated patient with ſaline draughts, and afterwards quieting with opium. So alſo in the ſpurious inflammation dependent on irritation, I have known opium keep off a diſpoſition to gangrene in the toes, even for years, where the diſcolouration and pain have con-

conſtantly returned ſoon after the opium has been laid aſide; although the patient has died at laſt of a gangrene of the extremities, at a very advanced age.

By whatever means, however, the gangrene may be ſtopped, there are but few caſes, I believe, where the bark, cordial medicines and wine, will not be found proper at ſome period of the diſeaſe. Should the gangrene take place from atony, general or local, the one or all of theſe will be proper from the beginning, and the patient muſt be ſupported by a generous diet throughout the cure. Should they fail in caſes evidently of this claſs, the vitriol. cærul. ſhould be given inſtead of the bark, beginning with very ſmall doſes, ſuch as an eighth of a grain, or leſs, four or ſix times a day, diſſolved in a ſpoonful of ſpirituous cinnamon water: a medicine excellently adapted to gangrenes attending that atony of habit induced by an impaired digeſtion from hard drinking; and as far as my experience has gone, is more efficacious than the bark, whenever the ſtomach will bear it. I once ſaw a remarkable inſtance of this in a large ſpreading ſphacelus, which was immediately checked by it, after the largeſt doſes of the bark had failed; and repeated re-appearances

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of the gangrene upon returning to the bark, as often ſtopped by returning to the vitriol.

To conclude this head, let the general habit of the patient, and the ſtate of the part diſeaſed be properly aſcertained; let us ceaſe preſcribing to the Name of a diſeaſe, and caſt off the ſhackles of prejudice; let us only make uſe of our underſtanding, and give attention to the ſymptons peculiar to the ſeveral caſes we are treating; and we ſhall find many gangrenes of the moſt unpromiſing appearances, and in a very ſpreading and ſphacelated ſtate, frequently checked by very ſimple and obvious means, and ſoon converted into well-conditioned ulcers, diſpoſed to heal up in a reaſonable time.

The habit is either in a ſtate of inflammation, and the patient more or leſs athletic, and then there will always be much true local inflammation; or the habit is atonic, with more or leſs of ſpurious inflammation of the parts, the conſtant concomitant of a debilitated ſyſtem. To check the inflammation in the one caſe, and to ſupport the vis vitæ and allay the local morbid action in the other, as well by external as internal means, is equally agreeable

ble to ſound theory, as it is ſupported by ſucceſs and experience.

Before I quit the ſubject of internal remedies, I cannot avoid taking notice of an inflammation too frequently terminating in dangerous ſuppuration, or gangrene, that has not, I believe, had that attention paid to it which it deſerves; I mean, the caſe of puncture by an invenomed inſtrument. This misfortune uſually falls to the lot of medical people, when employed in opening dead bodies, and on other occaſions ſomewhat ſimilar; and has too often proved fatal. Such accidents appear to me to be frequently very ill treated from the beginning, by purging, bleeding, and other antiphlogiſtic remedies, to the excluſion of the only proper, and very oppoſite means, that of invigorating the ſyſtem. I have known ſeveral ſuch caſes treated in the firſt-mentioned way, and all of them followed by great local miſchiefs, and ſome have even ended fatally. Whereas, in others, where there have been evident marks of infection, and abſorption of the poiſon, along the courſe of the lymphatic, the evil has been ſtopped, and the perſon been perfectly well the next day, by the oppoſite treatment. The beſt

remedy

remedy of this kind, I believe, is wine, which ſhould be partaken of freely, according to the conſtitution and habits of the patient, and if had recourſe to on the day of the accident, or any time before rigour, lowneſs, thirſt, or other ſymptom of affection of the ſyſtem have taken place, will generally prevent further infection, by ſtirring up the vires medicatrices naturæ to expel the poiſon. This may be further promoted by proper doſes of the bark, taken on the next day. The punctured part ſhould alſo be touched with the argent. nitrat. or if the injury be conſiderable, with the cauſtic alkali, which will penetrate deeper.

HAVING given theſe brief hints, I ſhall now cloſe with ſome ſimilar reflections on topical applications.

When the probable cauſe of the gangrene has been diſcovered, together with the general habit, and preſent circumſtances of the patient, the ſurgeon will be at no loſs how to adapt his applications and dreſſings; and this ſhould be invariably done. To ſtimulate and irritate an inflamed part, already too much in action, by balſams and ſpirits, when the general habit needs to be cooled and unloaded, were as contrary to good principles, as it muſt

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be unſucceſsful in practice. Here, emollient and relaxing fomentations, poultices, and ointments, are the moſt likely to abate the inflammation, to liberate the veſſels of the part, and aſſiſt nature to ſeparate the eſchar. On the other hand, poultices of ſtale beer and oatmeal, ſo frequently and indiſcriminately applied to ſphacelated parts, are not only always improper where there is much true inflammation, but even in the atonic ſtate, often do harm from their weight: in the former caſe, a poultice of fine linſeed-meal with a little ointment of elder-flowers, will be found preferable; for the latter, a ſoft bread and milk poultice with a good deal of theriaca. For gangrenes in old people, and often for thoſe of infants, eſpecially if the gangrene is ſmall, the theriaca alone is a very convenient application. It is light, potentially warm, and yet ſomewhat ſedative; it does not very ſoon get dry, and is more conveniently renewed than poultices and fomentations; and is ſeldom improper in ſuch ſubjects, unleſs the local action be conſiderably greater than the powers of the ſyſtem. But even then, the attempt may often be made with ſucceſs, as a contrary ſtimulus will ſometimes change the undue and morbid action of the parts, and occaſion a favourable turn to the diſeaſe.

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But the parts contiguous to the ſeat of gangrene, are almoſt always very painful, as long as the ſphacelus continues to ſpread, and are in this painful ſtate often improperly irritated by heating applications. The propriety of topicals ſhould ever be determined by their effects, and are generally hurtful, in theſe caſes, if they occaſion much pain; and ſhould this effect of ſtimulating applications, or even of fomentations and warmed poultices, continue for ſome hours after the gangrene has been dreſſed, they ſhould be changed for thoſe of a different quality, unleſs there be an evident atony of the parts. There may be, it has been ſaid, a ſtate of general debility, though from irritation there may be too great local action, which if not ſoon removed by a contrary ſtimulus from active applications, the continuing of them will increaſe the complaint. Here, ſedatives, and ſometimes poultices of bark, applied cold, may be made uſe of for a while, and will often do wonders, by allaying the morbid action of the parts, and mitigating the pain; after which, tonics external and internal, ſhould be employed.

By this means it is, I apprehend, that the fermenting poultice * has been found of late years ſo very ſerviceable, and is a grand acquiſition in ſurgery; but is too little known, by appearing only in a work not generally read by young ſurgeons. Its effects have been aſtoniſhing, and perhaps are aſſiſted by wrapping up the parts above the gangrene in compreſſes wrung out of ſpirits, and renewed as they become dry. It may not operate, however, altogether in the way Mr. POWER has conceived, nor yet by creating heat, as others have ſuppoſed, but as much from its being a ſedative, and applied in a cold ſtate, as from any ſpecific quality of its contents; and therefore derives not its chief virtues from its abſorbing, or correcting the acrimonious juices contained in ſphacelated parts, if it ſhould be allowed to have any tendency that way. However this may be, I believe it has effected cures, where ſeemingly from a bad habit of

* This may be made of flour, honey, and water, mixed up with yeaſt, and ſpread into a thin paſte, and ſet near the fire till it ſhall begin to ferment; and in that ſtate ſhould be laid on the part, once or twice a day, if the pain be very great. See *Appendix to the Medical Tranſactions of the College of Phyſicians*, vol. ii.

body,

body, gangrenes have been in a ſpreading ſtate for a long time together.

IN regard to ſcarifications, I believe it may be ſaid, that if we only cut through the eſchar, and do not penetrate the ſound parts, they will ſometimes be uſeful, both by taking off from the load and preſſure, and letting out an offenſive ichor: likewiſe in ſome inſtances, ſcarifications above the gangrened part where the limb is greatly enlarged, and the parts loaded with extravaſated ſerum, appear to prevent the ſpreading of the gangrene upwards, and are eventually beneficial.

I HAVE only further to obſerve, that as not a few patients ſink in conſequence of the diſcharge, even long after a ſeparation of parts has taken place, in caſes where amputation is impracticable; nothing can be more evidently indicated at this period, than good air, a nouriſhing and generous diet, a moderate quantity of wine, and other cordials, with ſuch tonic medicines as may beſt agree with the ſtomach.

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body, gangrenes have been in a spreading state for a long time together.

In regard to scarifications, I believe it may be said, that if we only cut through the cuticle, and do not penetrate the sound parts, they will sometimes be useful, both by taking off from the load and pressure, and letting out an offensive ichor: likewise in some instances, scarifications above the gangrened part where the limb is greatly enlarged, and the parts loaded with extravasated fluids, appear to prevent the spreading of the gangrene upwards, and are eventually beneficial.

I have only further to observe, that as most a few patients risk the acquittance of the discharge, even long after a separation of parts has taken place, in cases where amputation is impracticable; nothing can be more evidently indicated at this period, than good air, a nourishing and generous diet, a moderate quantity of wine, and other cordials, with such tonic medicines as may best agree with the stomach.